Chapter 13 – Flood Hazard Area Control

Subchapter 1. General Provisions

7:13-1.1 Purpose and Scope

- (a) The general purpose of this chapter is to control development in areas within the jurisdiction of this chapter in order to avoid or mitigate the detrimental effects of development upon the environment and the safety, health and general welfare of the people of the State.
- (b) Areas subject to inundation by flood waters are called flood plains. For the purpose of this chapter flood plains are divided into two classes, delineated and non-delineated.
- 1. Delineated flood plains have been established and officially adopted ("delineated") by the State of New Jersey. Each flood plain has been divided into a floodway and a flood fringe area. The procedure for delineating flood plains is established by N.J.S.A. 58:16A-52.
- 2. Other flood plains, and the watercourses that create them, are referred to as non-delineated.
- (c) The specific intent of this chapter is to minimize potential on and off site damage to public or private property caused by development which, at times of flood, subject structures to flooding and increase flood heights and/or velocities both upstream and downstream. These rules are also intended to safeguard the public from the dangers and damages caused by materials being swept onto nearby or downstream lands, to protect and enhance the public's health and welfare by minimizing the degradation of water quality from point and non point pollution sources and to protect wildlife and fisheries by preserving and enhancing water quality and the environment associated with the flood plain and the watercourses that create them.
- (d) Without proper controls, development in the flood plain and the watercourses that create them may adversely affect the flood carrying capacity of these areas, subject new facilities to flooding, reduce natural flood storage that the flood plain provides, increase the volume of storm water runoff, degrade the water quality of the receiving water body, and result in increased sedimentation, erosion or other environmental damage. Any development in areas regulated by this chapter must conform to criteria which, as outlined in this chapter, depend upon the characteristics of the area and the type of activity involved.

(e) The rules in this chapter govern minimum standards for development within areas within the jurisdiction of this chapter. The Department shall administer permits pursuant to this chapter, except as provided in N.J.A.C. 7:13-5.3.

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise.

"Acts" means the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and N.J.S.A. 13:1D-1 et seq.

"Alteration" means any manmade changes to lands located within the jurisdiction of this chapter.

"Anadromous fish" means fish which travel from salt water to fresh water or up waterways to spawn.

"Applicant" means a person who submits an application for a permit or other decision from the Department under this chapter.

"Application" means the completed Land Use Regulation Program (LURP) permit application form, as defined at N.J.A.C. 7:7-1.3, along with the appropriate fee, plans supporting calculations and reports as required by this chapter.

"Bank" means the inclined sides of the channel.

"Bed" means the floor of the channel.

"Cascades" means sections of beds consisting primarily of bedrock, with little rubble, gravel, or other such material present. The current is usually more swift than in riffles.

"Category One waters" means those waters designated in the tables in N.J.A.C. 7:9B-4.15(c) through (h) for the purposes of implementing the Antidegradation Polices in N.J.A.C. 7:9B-4. These waters may include, but are not limited to:

- 1. Waters originating wholly within Federal, interstate, State, county, or municipal parks, forests, fish and wildlife lands, and other special holdings that have not been designated as FW1 in N.J.A.C. 7:9B-4;
 - 2. Waters classified as FW2 Trout Production waters and their tributaries:
- 3. Surface waters classified as FW2 Trout Maintenance or FW2 nontrout that are upstream of waters classified as FW2 Trout Production;
 - 4. Shellfish waters of exceptional resource value; or,
- 5. Other waters and their tributaries that flow through, or border, Federal, State, county or municipal parks, forests, fish and wildlife lands, and other special holdings.

"Central Passaic Basin" means the flood plain along:

- 1. Central Passaic River: Extending from Little Falls at Beatties Dam upstream to Route 202 in Bernards and Harding Townships;
 - 2. Pompton River: Entire river;
- 3. Ramapo River: Extending from its confluence with the Pompton River upstream to Pompton Lakes Dam;
- 4. Pequannock and Wanaque Rivers: Extending from their confluence with the Pompton River upstream to Paterson-Hamburg Turnpike;

- 5. Dead River: Extending from its confluence with the Passaic River upstream to Liberty Corner Road in Bernards Township;
- 6. Harrison Brook: Extending from its confluence with the Dead River upstream to Lake Road in Bernards Township;
- 7. Rockaway River: Extending from its confluence with the Passaic River upstream to the Jersey City Reservoir (Boonton Reservoir);
- 8. Whippany River: Extending from its confluence with the Passaic River upstream to Route 10;
 - 9. Black Brook: entire reach; and
- 10. Beaver Dam Brook: Including East and West Ditches from Pompton River to Jacksonville Road in Lincoln Park.

"Channel" means the well-defined bed and banks of a watercourse which confine and conduct flowing water continuously or intermittently.

"Channelization" means any artificial reconstruction of the bed and/or banks such as by straightening, lining, deepening or piping.

"Commissioner" means the Commissioner of the Department of Environmental Protection.

"Dam" means any artificial dike, levy or other barrier together with appurtenant works, which is constructed for the primary purpose of impounding water on a permanent or temporary basis, that raises the water level five feet or more above its usual mean low water height when measured from the downstream toe-of-dam to the emergency spillway crest or in the absence of an emergency spillway, to the top of dam. Low dams raise the water level less than five feet.

"Delegated agency" means a county agency to which the Department has delegated its power to approve or disapprove certain classes of applications under this chapter or enforce certain provisions of this chapter.

"Department" means the New Jersey Department of Environmental Protection.

"Detention basin" means an impoundment area created by constructing an embankment, excavating a pit or both for the purpose of temporarily storing storm water.

"Development" means any construction activity or other manmade land disturbance.

"Encroachment Line" means a line, described by metes and bounds, which defines the boundary between the floodway and flood fringe area in a non-delineated flood plain and customarily marks the limit of fill to be placed in a delineated flood plain.

"Erosion" means detachment and movement of soil or rock fragments by water, wind, ice or gravity.

"Excavation" means removal or recovery, by any means whatsoever, of minerals, mineral substances or organic substance, other than vegetation, from the water, land surface or beneath the land surface, whether exposed or submerged.

"Fill" means any material placed or deposited within the flood plain or the watercourses that create them which will displace floodwaters.

"Fish habitat enhancement device" means a device consisting of deflectors, low-flow channel structures, mud sills, boulders, felled shoreline trees, tire structures,

brush, rubble reefs, or spawning/nursery structures as developed and approved by the Department.

"Flats" means sections of channel with current too slow to be classified as riffle and too shallow to be classified as a pool. The bottom usually consists of sand or finer materials.

"Flood carrying capacity" means the ability of a watercourse or flood plain to transport flood waters, as determined by its shape, cross-sectional area, bed slope, coefficient of hydraulic friction, and upstream and downstream channel configurations, as used in accepted engineering practices.

"Flood damage potential" means the susceptibility to damage by potential floods at that site, as well as a given site's potential to increase off-site flooding.

"Flood fringe" means that portion of the flood plain outside of the floodway or encroachment lines.

"Flood hazard area design flood" means the flood used in State Adopted Flood Studies. It is the flood resulting from the 100-year flood discharge increased by 25 percent.

"Flood hazard design elevation" means the elevation of the flood hazard area design flood.

"Flood plain" means the area inundated by the regulatory flood including the watercourse that creates it.

"Flood proofing" means any combination of structural and nonstructural design features, additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, structures and their contents.

"Floodway" means the channel and portions of the flood plain adjoining the channel which are reasonably required to carry and discharge the regulatory flood. For the purpose of this chapter the term floodway shall refer to both the delineated floodway on State Adopted Studies and the area between the encroachment lines located on both sides of a non-delineated watercourse.

"Fluvial flood" means a flood which is caused entirely by runoff from rainfall in the upstream drainage area and is not influenced by the tide or tidal surge.

"Freshwater wetland" or "wetland" means an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation; provided, however, that the Department, in designating a wetland, shall use the three-parameter approach (that is, hydrology, soils and vegetation) enumerated in The Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), and any subsequent amendments thereto.

"FW" means the general surface water classification applied to fresh waters in the Department's Surface Water Quality Standards, N.J.A.C. 7:9B.

"FW1" means the waters designated as FW1 in the Department's Surface Water Quality Standards, N.J.A.C. 7:9B.

"FW2" means the general surface water classification applied in the Department's Surface Water Quality Standards, N.J.A.C. 7:9B, to those fresh waters that are not designated as FW1 or Pinelands waters.

"Hazardous materials" means those materials as defined by or pursuant to the Spill Compensation and Control Act, N.J.S.A. 58:19-23.11 et seq., or pollutants as defined by the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.

"Low water" means the water level characteristic of a channel during low flow conditions.

"Major project" means that class of project defined as major in the 90-Day Construction Permit Rules (N.J.A.C. 7:1C).

"Manual" means the latest version of the Technical Manual for this chapter published by the Department.

"Minor project" means that class of project defined as minor in 90-Day Construction Permit Rules (N.J.A.C. 7:1C).

"Mitigation" means activities carried out in order to compensate for loss or disturbance of the environment caused by regulated activities and may include restoration, creation, enhancement or donation of land of appropriate environmental characteristics.

"Net fill" means the volume of fill which will displace flood waters left after the total volume of cuts, which will provide additional flood storage, made on the project site has been subtracted from the total volume of fill which will displace flood waters placed on the project site.

"90-Day Construction Permit Rules" means the rules appearing in N.J.A.C. 7:1C.

"Non-regulated use" means any use not subject to the provisions of this chapter.

"Non-trout waters" means the non-trout waters identified in the Department's Surface Water Quality Standards (N.J.A.C. 7:9B).

"Obstruction" means, but is not limited to, any structure, fill or other material placed in the flood plain which may impede, retard, or change the direction of the flow of water either by itself or by catching or collecting debris carried by such water or that is placed where the flow of water might carry the same downstream and constitute a hazard to life or property.

"One hundred-year flood" means a flood that is estimated to have a one percent chance, or one chance in a hundred, of being equaled or exceeded in any one year.

"Perennial watercourse" means any watercourse mapped as perennial on either the 72 inch topographic maps published by the U.S. Geological Survey or the detailed map sheets in County Soil Surveys published by the U.S. Department of Agriculture, Soil Conservation Service, unless site specific information to the contrary is presented to and accepted by the Department.

"Permit" means a permit issued by the Department to engage in activities regulated under this chapter.

"Person" means corporations, companies, associations, societies, firms, partnerships and joint stock companies, as well as individuals, the Federal government, the State, and all political subdivisions of the State or any agencies or instrumentality thereof.

"Pools" means sections of channel which are deeper and have appreciably slower current than areas immediately upstream or downstream. The bed is usually a mixture of silt and coarse sand; the water depth usually exceeds two feet.

"Prohibited use" means a use which fails to comply with the requirements of this chapter and which shall not be allowed except in the case of exceptional and undue hardship as defined in N.J.A.C. 7:13-2.2.

"Public hearing" means a public meeting convened to allow the public to comment on the project proposed in the application.

"Regulatory flood" means the 100-year flood along non-delineated watercourses or the flood hazard area design flood along delineated watercourses.

"Riffles" means sections of a channel containing gravel or rubble in which surface water is at least slightly turbulent and current is swift enough that the surface of the gravel and rubble is kept fairly free from sand and silt.

"Retention basin" means an impoundment area with a permanent pool made by constructing an embankment, or excavating a pit, or both for the purpose of temporarily storing storm water.

"Soil Conservation District" means a political subdivision of the State of New Jersey authorized under N.J.S.A. 4:24-1 et seq.

"Solid waste" means garbage, sludge, refuse, trash, rubbish, debris or other discarded materials.

"State Soil Conservation Committee" means the agency created pursuant to N.J.S.A. 4:24-1 et seq.

"Stream encroachment" means any manmade alteration, construction, development or other activity within the areas within the jurisdiction of this chapter.

"Stream Encroachment Permit" means a permit issued by the Department, or delegated agency under the provisions of the Acts.

"Structure" means any assembly of materials above or below the surface of land or water including, but not limited to, buildings, fences, dams, fills, levees, bulkheads, dikes, jetties, embankments, causeways, culverts, roads, railroads, bridges and the facilities of any utility or governmental agency. Trees and vegetation are not structures.

"Threatened or endangered species" means those species of animals listed pursuant to "The Endangered and Nongame Species Conservation Act," N.J.S.A. 23:2A-1 et seq., identified in N.J.A.C. 7:25-4.13, and 7:25-4.17, and those species of plants identified in the Endangered Plant Species List, N.J.A.C. 7:5C-5.1.

"Tidal flood" means a flood caused by the tide backing up a channel.

"Trout-associated watercourses" means watercourses that are:

- 1. Trout production waters;
- 2. Trout maintenance waters:
- 3. Non-trout waters upstream from trout production waters (with or without intervening trout maintenance waters);
- 4. Non-trout waters less than one mile upstream from trout maintenance waters that are not upstream from trout production waters; or
- 5. Tributaries flowing into trout production or trout maintenance waters which will take the classification of the waters they flow into.

"Trout maintenance waters" means the trout maintenance waters identified in the Department's Surface Water Quality Standards (N.J.A.C. 7:9B).

"Trout production waters" means the trout production waters identified in the Department's Surface Water Quality Standards (N.J.A.C. 7:9B).

"Trout stocked waters" means waters that are stocked with trout by the Department's Division of Fish, Game and Wildlife, as listed in N.J.A.C. 7:25-6 and amendments thereto as adopted by the New Jersey Fish and Game Council.

"Upstream/downstream" refers to direction with respect to a fixed point in a waterway.

"Watercourse" means a path which conveys surface water runoff. Flow paths with a total contributory drainage area less than 50 acres must have definable bed and banks to be considered a watercourse.

7:13-1.3 Applicability

- (a) All development within the larger of the following areas shall require a permit under this chapter unless specifically exempted as provided in this chapter:
 - 1. The flood plain, as defined at N.J.A.C. 7:13-1.2;
 - 2. Twenty-five feet back from the top of the channel bank; or
 - 3. Fifty feet back from the top of the channel bank along waters
 - i. Containing deposits of acid-producing soils as defined in N.J.A.C. 7:13-5.10;
 - ii. Classified as Category One, FW-1 trout-associated, or, FW-2 trout-associated;
- iii. Which are a critical part of the habitat supporting a threatened or endangered species of plant or a current population of any species of threatened or endangered animal on a permanent or temporary basis, for any purpose such as resting, breeding or feeding, during any portion of its life-cycle; or
- iv. Located within documented, historic habitat for threatened or endangered species of animals, which habitat remains suitable for breeding, resting or feeding by those species of animal during any portion of its life-cycle.
- (b) New Jersey's geography and location along the Atlantic coastline subjects the State to both tidal and fluvial flooding. The effects of development on flood elevations vary depending on the type of flooding and the area in which it occurs. For the purpose of this chapter, three areas of concern have been identified based on the type of flooding and the impact of development in that particular area. These areas are as follows:

- 1. Tidal: Tidal flooding is the result of higher than normal tides which in turn inundate low lying coastal areas. The 100-year tidal flood elevation will not be affected by development. Therefore, certain areas in which the regulatory flood is the 100-year tidal flood will not be regulated under this chapter. The elevation of the 100-year tidal flood, which varies along the coast, can be obtained from the Department.
- i. Tidal water bodies not regulated under this chapter shall include, but not be limited to, the Atlantic Ocean and all water bodies named on the U.S. Geological Survey 72 inch topographic maps as "bays," "canals," "coves," "guts," "harbors," "inlets," "sounds," "thorofares," and "channels," except for: the portion of the Delaware River near Camden called "Back Channel," all man-made lagoons and canals and all sections of the "Intracoastal Waterway."
- ii. The lower reach of a watercourse that flows into a tidal water body will be subject to the same flooding characteristics as the tidal water body. Subparagraph (b)1ii(1) through (16) below identifies reaches along specific watercourses that will be considered tidal for the purposes of this chapter and, therefore, not regulated under this chapter. Along those watercourses not specifically identified in (b)1ii(1) through (16) below that flow into tidal waterbodies listed in (b)1 above, the reach between the mouth of the watercourse and the closer of either the first bridge or culvert upstream or the point upstream where the regulatory flood exceeds the 100-year tidal elevation will be considered a tidal water body for the purposes of this chapter and, therefore, not regulated under this chapter.
 - (1) Arthur Kill (Middlesex Co./Union Co.): entire reach;
 - (2) Comptons Creek (Monmouth Co.) Raritan Bay to Campbell Avenue;
 - (3) Deal Lake (Monmouth Co.) Atlantic Ocean to Wickapecko Drive;
 - (4) Hackensack River (Hudson Co.) Newark Bay to the Pulaski Skyway;
 - (5) Hudson River (Bergen Co./Hudson Co.);
 - (6) Manasquan River (Monmouth Co./Ocean Co.): Atlantic Ocean to Route 70;
 - (7) Metedeconk River (Ocean Co.): Barnegat Bay to Route 70;
 - (8) Navesink River (Monmouth Co.): Shrewsbury River to Coopers Bridge;
 - (9) Passaic River (Essex Co./Hudson Co.) Newark Bay to the Pulaski Skyway;
 - (10) Raritan River (Middlesex Co.): Raritan Bay to The New Jersey Turnpike;

- (11) Shark River (Monmouth Co.): Atlantic Ocean to confluence with Laurel Gully Brook;
 - (12) Shrewsbury River (Monmouth Co.): Sandy Hook Bay to Seven Bridge Bay;
 - (13) Waretown Creek (Ocean Co.) Atlantic Ocean to Route 9;
 - (14) Whale Brook (Middlesex Co./Monmouth Co.): Raritan Bay to Route 35;
 - (15) Wreck Pond (Monmouth Co.) Atlantic Ocean to Route 71; and
- (16) All tidal watercourses flowing into Raritan Bay, north of Route 36 in Monmouth County.
- 2. Tidally influenced: Tidally influenced areas are subject to both tidal flooding and flooding caused by the tidal wave traveling up a watercourse. Since the Department is concerned with environmental impacts in the flood plain and obstructions to flow in the floodway produced by development in these areas the engineering standards for the flood fringe will not apply in these areas.
- 3. Fluvial: Fluvial flooding is the result of storm water runoff which exceeds the capacity of the watercourse to carry the flow without endangering life or property. In this area, development may affect upstream and/or downstream flood elevations by increasing or decreasing obstructions to flow. Therefore, in this area, all of the requirements of this chapter shall apply.
- (c) This chapter shall not apply to development along the Delaware and Raritan Canal except insofar as such activities affect watercourses that flow into, over, under, or parallel to the canal.
- (d) This chapter shall not apply to lands that are regulated pursuant to "The Wetlands Act of 1970," N.J.S.A. 13:9A-1 et seq. or to lands located within tidally influenced flood plains that are regulated pursuant to the Waterfront and Harbor Facilities Act, N.J.S.A. 12:5-1 et seq. or the Coastal Area Facilities Review Act (CAFRA), N.J.S.A. 13:19-1 et seq.
 - (e) Non-regulated uses in the floodway are as follows:
- 1. For purposes of this section, non-regulated uses are uses which are not prohibited in N.J.A.C. 7:13-2.2, and which:

- i. Do not further obstruct flood flow, or in any way reduce the cross-sectional area of the floodway open to the flow of water during the regulatory flood, unless the obstruction will be insignificant, such as the those activities listed in (e)2 below;
- ii. Do not require the erection of structures, except as specifically noted in (e)2 below;
 - iii. Do not require channel modification or relocation;
- iv. Do not alter the cross-sectional area of a water-control structure such as a bridge, culvert or dam that is open to flood waters during the regulatory flood;
- v. Do not increase off-site flood damage potential by raising flood elevations off of the property on which the use is proposed by more than two-tenths of a foot or 2.4 inches;
 - vi. Do not adversely affect those areas described in (a) above;
- vii. Do not cause or contribute to a violation of any applicable State water quality standard or otherwise adversely affect water quality; and
 - viii. Are undertaken with the land owner's express written permission.
- 2. Non-regulated uses which satisfy the conditions of (e)1i and ii above may include, but are not limited to:
- i. Lawns, gardens and areas specifically designed and intended for use by children;
- ii. Areas specifically marked and designated for private and public recreation such as: playing fields with backstops and/or open bleachers, picnic grounds, swimming areas, parks, wildlife and nature preserves, game farms, hunting and fishing areas, boat launching ramps constructed at or below grade, shooting preserves, bicycle paths, hiking and horseback riding trails, as well as in ground swimming pools and associated fences for public safety provided that the pool is constructed at or below existing grade and that the fence is open to allow flood waters to pass through it, is no higher than the minimum height required by the BOCA construction code for a fence around a pool, and is placed so as to minimize the obstruction to flow to the maximum extent possible;
- iii. Hand removal of debris along a reach of the watercourse, or the removal of individual major obstructions in the channel, such as a fallen tree or other large or heavy object, such as abandoned vehicles, furniture or other trash that cannot be removed by hand. No equipment shall be allowed in the channel unless specifically approved in writing by the Department;

- iv. Open decks attached to residential structures, properly anchored in accordance with the Uniform Construction Code and all applicable local building codes;
- v. Minor repair, maintenance or replacement-in-kind of existing roads, bridges, culverts, gauging structures (including weirs) or retaining walls which will not change the cross-sectional area open to flow during the regulatory flood or increase the footprint of the structure;
- vi. Agriculture uses such as general cultivation, pasture, grazing, outdoor plant nurseries, horticulture, viticulture, forestry, sod farming, wild crop harvesting and on-going farming operations;
- (1) Specific soil conservation practices such as terracing, construction of diversions, subsurface tile drainage and the construction of grassed waterways and dug ponds will be considered non-regulated uses only when approved in writing by the appropriate County Soil Conservation District Office and the local U.S.D.A. Soil Conservation Service;
- vii. Docks and boathouses along bodies of water labeled as a lake, reservoir or pond on the USGS Quadrangle Maps that are built on pilings and remain open underneath to allow water to pass freely. For boathouses the floor must be above the regulatory flood elevation;
- viii. Utility poles or towers which cannot be located outside of the floodway. Poles and towers must be properly anchored to withstand the structural loads and stresses (both hydrostatic and hydrodynamic) from flooding equal to the regulatory flood elevation:
 - ix. Utilities "jacked" under watercourses that do not disturb the channel:
- x. Placement of fish habitat enhancement devices in lakes, ponds, reservoirs and impoundments performed by or approved by the Division of Fish, Game and Wildlife, Bureau of Freshwater Fisheries, in the Department; and
- xi. Placement of in-stream fish habitat enhancement devices acceptable to the Land Use Regulation Program in the Department as performed by or approved by the Division of Fish, Game and Wildlife Bureau of Freshwater Fisheries, in the Department.
- 3. Irrigation head gates along watercourse banks are non-regulated uses when approved in writing by a County Agriculture Agent pursuant to N.J.A.C. 7:20A-1.
 - (f) Non-regulated uses in the flood fringe are as follows:

- 1. For the purpose of this section, non-regulated uses are land uses within flood fringe areas which:
- i. Do not further reduce the volume of flood storage available, unless the reduction will be insignificant and offset by the benefits to the public health, safety and welfare such as those activities listed in (f)2 below;
- ii. Do not require any hydrologic or hydraulic calculations to determine the impact;
 - iii. Do not adversely affect those areas described in (a) above;
- iv. Do not cause or contribute to a violation of any applicable State water quality standard or otherwise adversely affect water quality; and
 - v. Are undertaken with the land owner's express written permission.
- 2. Non-regulated uses which satisfy the conditions of (f)1 above may include the following and other uses similar in character and environmental impact:
- i. Residential and commercial: Improvements such as lawns, play areas specifically designed for use by children, gardens or landscaping; fences; anchored dog houses; auxiliary utility buildings up to 100 square feet; pole barns which shall remain permanently open on all sides, driveways at grade, barbecue pits, open decks attached to residential structures and one or more additions to an owner occupied single-family residential structure up to a total of 300 square feet;
- ii. Private and public recreation: Areas specifically marked and designated as: playing fields or courts including backstops and/or open bleachers, bicycle paths, picnic grounds, swimming areas, parks, wildlife and nature preserves, game farms, hunting and fishing areas, boat launching ramps constructed at grade, shooting preserves, hiking and horseback riding trails, driving ranges, archery ranges, target ranges, trap and skeet ranges, fish hatcheries; anchored auxiliary utility buildings up to 100 square feet as well as fences and in-ground and above-ground pools provided that they do not displace more than 100 cubic yards of flood plain storage;
- iii. Agriculture: General cultivation, pasture, grazing, fences, irrigation, outdoor plant nurseries, horticulture, viticulture, forestry, sod farming, wild crop harvesting, on-going farming operations, and registered farming operations, excluding greenhouses and all other structures related to any of the foregoing uses.
- (1) Specific soil conservation practices such as terracing, construction of water diversions, subsurface drainage and the construction of grassed waterways and dug

ponds will be considered non-regulated uses only when approved in writing by the appropriate County Soil Conservation District Office;

- (2) Plastic covered greenhouses and other auxiliary utility buildings constructed without permanent foundations and anchored, pursuant to the Uniform Construction Code and all applicable local building codes, and fences associated with agricultural uses.
 - iv. Utility poles and towers; and
 - v. Roadway repairs and maintenance that will not raise the existing road grade.
- (g) Persons may submit a request for a written jurisdictional determination pursuant to this section. A request for a jurisdictional determination shall contain a complete description of the work proposed and an engineering site plan showing the described work as well as existing and proposed topography. If the Department determines that it has jurisdiction over the proposed work, a permit pursuant to this chapter shall be obtained before any work commences.

7:13-1.4 Construction

- (a) The provisions of this chapter shall be liberally construed to permit the Department to fulfill its statutory obligations.
- (b) The Commissioner may amend, repeal or rescind this chapter or any part thereof in conformance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seg.

7:13-1.5 Program Information

Information and forms relating to permits under this chapter may be obtained from:

Department of Environmental Protection Land Use Regulation Program CN 401 Trenton, New Jersey 08625 (609) 292-1235

7:13-1.6 Other State statutes, rules and regulations

The powers, duties, and functions vested in the Department under the provisions of the Acts or the provisions of this chapter, shall not be construed to limit in any manner the powers, duties, and functions vested therein under any other provision of law or regulation except as specifically set forth in this chapter.

7:13-1.7 Severability

If any section, subsection, provision, clause or portion of these rules or the application thereof to any person or circumstance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of these rules and their application to persons and circumstances other than those to which they have been held invalid shall not be affected thereby.

Subchapter 2. Project Standards

7:13-2.1 General

- (a) The engineering standards of this subchapter will only apply along watercourses within the jurisdiction of this chapter that have a total contributory drainage area greater than 50 acres.
- 1. The engineering standards for development in the flood fringe area will not apply to tidally-influenced flood plains as described in N.J.A.C. 7:13-1.3(b).
- (b) The environmental standards of this subchapter will apply along all watercourses under the jurisdiction of this chapter regardless of the drainage area except along manmade, but not manaltered, watercourses with a total contributory drainage area less than 50 acres.

7:13-2.2 Prohibited uses

- (a) The following are prohibited uses in floodways:
- 1. The addition of any fill, new structures or fences which would raise the existing grade of the receiving area and/or create an obstruction to flow, except as provided in (b) below;
 - 2. The addition of any solid or hazardous waste or pollutant;
- 3. The discharge, processing, storage or disposal of pesticides, domestic or industrial wastes, radioactive materials, petroleum products or other hazardous materials except as specifically authorized by law and pursuant to permits, licenses and grants from all authorities with jurisdiction over such activities;
 - 4. The storage of materials or equipment;
 - 5. The construction of individual subsurface sewage disposal systems; and
 - 6. The construction of off-channel detention/retention basins.

- (b) Exceptions to (a)1 above are as follows:
- 1. Land uses existing prior to March 20, 1995 which were in conformance with all relevant laws and regulations when the use commenced or which have subsequently been specifically and plainly permitted or approved since then pursuant to all applicable Federal, State or local laws may be maintained. Such uses may be expanded or enlarged only if:
 - i. No further obstruction to flow is created;
- ii. The lowest floor elevation of any structure that is expanded is at or above the regulatory flood elevation;
 - iii. The structure is flood proofed or treated to minimize future flood damage;
- iv. The owner submits an application for a permit under this chapter together with drawings of the proposed changes and the application is approved by the Department; and
- v. Calculations are submitted to the Department which prove that new structures, alone or in combination with existing structures, are designed, connected and anchored to resist impact from debris, flotation, collapse or permanent lateral movement caused by expected structural loads and stresses (including both hydrostatic and hydrodynamic loads) from flooding to the regulatory flood elevation. Calculations shall be certified as true and accurate by a New Jersey licensed engineer or architect.
- 2. Structures (or portions thereof) constructed prior to March 20, 1995 which were constructed in accordance with all relevant laws and regulations in effect at the time of their construction or which have subsequently been specifically and plainly permitted or approved since then pursuant to all applicable Federal, State or local laws and which were damaged by flooding or any means other than flooding may be restored provided that:
- i. The restored structure will not create a larger obstruction to flow than the original structure;
- ii. The lowest finished floor elevation of the restoration is at or above the regulatory flood elevation, where feasible;
- iii. The work done is flood proofed or similarly treated to minimize future flood damage;

- iv. The owner submits an application for a permit under this chapter together with drawings of the proposed reconstruction and the application is approved by the Department; and
- v. The structures are designed, connected and anchored to resist impacts from water and debris, flotation, collapse or permanent lateral movement due to structural loads and stresses (both hydrostatic and hydrodynamic) from flooding equal to the regulatory flood elevation, where feasible. Calculations shall be certified as true and accurate by a New Jersey licensed engineering or architect.
- 3. Sanitary landfills constructed prior to (the effective date of these new rules) and constructed in accordance with all relevant laws and regulations in effect at the time of construction or which have subsequently been specifically and plainly permitted or approved since then pursuant to all applicable Federal, State or local laws may be expanded vertically provided that:
 - i. No horizontal expansion is made;
- ii. The side slopes of the landfill are not steeper than a ratio of two horizontal to one vertical:
- iii. Soil erosion and sediment control measures in accordance with the requirements of this chapter are taken;
 - iv. The flood damage potential is not increased; and
 - v. The other applicable provisions of law are complied with.
 - (c) The following are prohibited uses in the flood fringe:
- 1. The disposal or storage for any period of time of pesticides, industrial, hazardous or solid wastes, radioactive materials, petroleum products or other hazardous materials, which could during the regulatory flood enter the flood waters and endanger the public health, safety and welfare. Wastewater and water treatment plants to be located in the flood fringe shall comply with the requirements of this chapter.

7:13-2.3 Regulatory flood

(a) The regulatory flood for delineated watercourses is the flood hazard area design flood. This flood represents the 100-year flood flow increased by 25 percent to allow for future development in the drainage basin. Flood profiles, mapping and the corresponding computer models for delineated watercourses may be obtained by contacting:

Department of Environmental Protection

Flood Plain Management 501 East State Street CN-401 Trenton, New Jersey 08625 (609) 292-2296

- (b) The following pertain to non-delineated watercourses:
- 1. The volume of flood waters and the resulting flood elevations are increased as a drainage basin is developed. The State delineations account for this increased flooding by adding an additional 25 percent to the calculated 100-year flood discharge. Therefore, in order to properly carry out the intent of the Acts and protect life and property in or near the flood plain, the regulatory flood flows along non-delineated streams shall be calculated assuming that the entire contributory drainage area is fully developed in accordance with the current zoning plan, to the maximum impervious cover allowed thereunder, and in accordance with applicable storm water management regulations.
- 2. The Flood Insurance Program, administered by the United States Federal Emergency Management Agency (FEMA), classifies flood plain areas in a manner similar to the State of New Jersey and publishes Flood Insurance Rate Maps as well as Floodway Maps for individual municipalities that are in the program. However, since the FEMA maps only reflect the 100-year flood plain at the time of the study and did not anticipate future development in the drainage basin, they can not be used to establish the regulatory flood elevation for the purposes of this chapter unless it can be demonstrated to the satisfaction of the Department that the FEMA study reflects full development in the Drainage basin or that there is a viable basin-wide storm water management system in place that will not increase the peak flows developed by the FEMA study.
- (c) Structures that span the flood plain and/or act as control structures for the watercourse, such as bridges, culverts or low dams, shall be designed so that any increase in flood elevations, upstream or downstream, will not subject existing residential or commercial buildings to increased flood damages during floods of lesser frequency than the regulatory flood.
- 1. For example, water-control structures constructed onstream to impound water for flood control or other purposes may reduce the 100-year flood elevation but can significantly increase the lesser-frequency floods such as the two or 10 year floods. Another example is an adequate culvert which is overtopped during the regulatory flood but not during lesser frequency floods. Replacing this structure with a larger structure may not affect the regulatory flood elevation but can significantly increase flood elevations downstream during lesser frequency floods. Since the lesser-frequency

floods are more likely to occur, projects such as these can significantly increase the flood damage potential in a developed area.

- 7:13-2.4 Establishment of flood plain limits and encroachment lines on non-delineated watercourses
- (a) The boundaries of the flood plain along non-delineated watercourses shall be established by a standard step backwater analysis using the flow rate developed assuming full development of the contributory drainage area.
- (b) The encroachment lines shall be set anywhere outside of the floodway, which is established through equal conveyance reduction calculations, using the flood elevation determined by the standard step backwater analysis described in (a) above and the specific site cross-sections. The allowable rise in water surface shall be no more than two-tenths of a foot.

7:13-2.5 Watercourse cleaning

- (a) Watercourse cleaning permits shall be issued for projects which involve the removal of accumulated material from the channel by mechanical means, only if there is a demonstrated need for the removal of the material that cannot be met, remedied or addressed by other means and the following environmental standards are met:
- 1. Only accumulated silt, sediment or debris found in the channel may be removed from the watercourse. Removal shall not extend beyond or below the natural channel. Removal of material below the natural watercourse channel shall be considered a channel modification and subject to the requirements of N.J.A.C. 7:13-2.9;
- 2. Spoils shall be disposed of in accordance with all Federal, State and local laws;
- 3. The use of heavy equipment within the channel shall be avoided to the greatest extent possible;
- 4. Disturbance to near-stream vegetation shall be minimized to the greatest extent possible;
- 5. Cleaning shall not adversely affect the fisheries resources or any species of threatened or endangered species; and
- 6. Cleaning shall not adversely affect the habitat of any species of Threatened or Endangered animal or plant, whether currently occupied or documented, historic habitat.

- (b) An applicant may apply for a cleaning and maintenance permit for portions of any watercourse under their jurisdiction. Upon application, the permit may allow for the initial cleaning and subsequent maintenance of the cleared channel for the five year life of the permit provided that the requirements of (a) above are satisfied. Additional watercourses, not included in the original permit, that are on the applicant's private property covered by the original permit or under the jurisdiction of the applicant that applied for the original permit, may be added during the life of the permit through an application to modify the permit pursuant to N.J.A.C. 7:13-4.9 provided that the requuirements of (a) above are satisfied.
- (c) The required information for the watercourse cleaning application is the same as that outlined in N.J.A.C. 7:13-4.1. In addition, the application shall contain the following:
 - 1. A narrative which:
- i. Describes the project area including the specific points of access to the watercourse;
 - ii. States why the project is required and its specific objectives;
- iii. Specifies the methods of excavation and types of equipment to be used on each segment of the watercourse; and
- iv. Specifies the methods and locations of spoil disposal and the methods of soil erosion and sediment control to be used during the project;
- 2. Color photographs of the areas of the watercourse(s) to be cleaned and of the access points; and
- 3. Plan drawing(s) of sufficient scale, but no greater than one inch = 200 feet, showing the exact limits of work for each reach of the watercourse affected and cross-sections showing the material to be removed. All specific snags, rocks, logs, sand bars, etc., to be removed must be identified on the plan.
- i. When a Mosquito Commission is the applicant, drawings may be signed by the Mosquito Commission superintendent.
- (d) Spoil disposal methods and soil erosion and sediment control techniques shall comply with the provisions of this chapter.
- (e) Projects intended solely for mosquito control that exceed the criteria in (a) above shall be granted by the Department if the applicant meets the following criteria:

- 1. The applicant has provided notice as required for a hardship exemption under N.J.A.C. 7:13-4.2;
- 2. In the case of projects of significant public interest, the applicant has convened a public hearing informing the public of the purpose and scope of the project and responding to public comment;
- 3. The applicant has demonstrated that no reasonable alternative exists whereby the objectives of the project can be satisfied;
- 4. The applicant has demonstrated that the adverse environmental impacts of the project will be minimized; and
- 5. The applicant submits individual, site-specific project proposals to the Administrator of the State Office of Mosquito Control Coordination, and the Administrator determines that the project is necessary to control a documented mosquito problem to existing residents.

7:13-2.6 Excavation

- (a) Engineering and environmental standards for excavation are as follows:
- 1. All projects involving permanent excavation within the flood plain shall not have cut faces at slopes steeper than a ratio of two horizontal to one vertical.
- 2. Excavation projects shall not be so deep as to affect any wells in the surrounding areas or to cause any ground water pollution.
- 3. The Department may set special conditions concerning the character, excavation methods, and disposal sites of any excavated materials as required to ensure the safety of persons and property affected by the excavation.

7:13-2.7 Disposal of spoils

- (a) Engineering standards for disposal of spoils are as follows:
- 1. Disposal of spoils is prohibited within the floodway of any flood plain under the jurisdiction of this chapter, except for watercourse cleaning projects approved by the Department.
- 2. Any material permitted by the Department to be disposed of in the flood fringe area shall be spread evenly to a depth specified in writing by the Department and shall not inhibit the positive drainage of the area.

- 3. Where watercourse cleaning spoils feasibly cannot be removed from the site, a description of the method of on-site disposal shall be indicated on the plan. The Department may set special conditions concerning excavation methods, contents and disposal sites of any excavated materials as required to ensure the safety of persons and property affected by the project.
 - (b) Environmental standards for disposal of spoils are as follows:
- 1. No spoils shall be placed within 25 feet of the top of bank or within the area described in N.J.A.C. 7:13-1.3(a)3, except for watercourse cleaning projects approved by the Department. The natural characteristics of this 25 or 50 foot area shall be preserved to the greatest extent possible, with selective tree removal permitted only when absolutely necessary. Brush and trees that when measured 4.5 feet from the ground are less than four inches in diameter may be selectively and sparingly cleared to provide access to the watercourse or site.
- 2. Spoil material shall be stabilized within 48 hours of its placement according to the "Standards for Soil Erosion and Sediment Control," N.J.A.C. 2:90. Details of the methods of stabilization selected by the applicant shall be included on the plans submitted to the Department.
- (c) In the case of projects performed by Mosquito Commissions for the sole purpose of mosquito control, the disposal of spoils will be reviewed pursuant to the requirements of N.J.A.C. 7:13-2.5(e).

7:13-2.8 Stormwater management

If a project or activity meets the definition of "major development" at N.J.A.C. 7:8-1.2, then the project or activity shall comply with the Stormwater Management rules at N.J.A.C. 7:8.

7:13-2.9 Channel modification

- (a) Channelization of an existing watercourse or watercourse relocation is prohibited except where necessary to control existing flooding and/or erosion which threatens life or property or in cases in which the Department determines that the effects of channelization are offset by the resulting restoration or improvement of the natural characteristics of the nearby environment.
 - (b) Engineering standards for channel modifications are as follows:
- 1. When change in the watercourse channel is proposed, the applicant shall submit plans reflecting the manner in which the channel shall be stabilized at the point of each change to ensure that no erosion occurs at either high or low flows. If a change

in slope causes a hydraulic jump to occur just downstream of the constructed area, the applicant shall submit plans describing methods to protect the integrity of the downstream channel. The methods for stabilization shall be in accordance with the "Standards for Soil Erosion and Sediment Control in New Jersey" or the latest amendment thereto, N.J.A.C. 2:90.

- 2. If the channel modification results in a reduction of the water surface, the change in the volume of flood storage in the flood fringe shall be considered as fill for the purposes of this chapter.
 - (c) Environmental standards for channel modification are as follows:
- 1. Reconstruction of aquatic habitat damaged or destroyed during channelization is required (N.J.A.C. 7:13-3.4) whether or not the watercourse is trout-associated. This includes, but is not limited to, replication of aquatic characteristics such as percent meandering, bottom substrate type, pool/riffle ratio, stream width, depth and gradient, and the placement of habitat enhancement devices within the watercourse. Provision for Fish Passage (N.J.A.C. 7:13-3.6(c)) is required, as is vegetative bank stabilization to reestablish any near-watercourse habitats damaged or destroyed as a result of the construction of the project.

7:13-2.10 Underground utilities in the flood plain

- (a) Underground utilities include, but are not limited to, electric cables, telephone cables, sanitary sewer lines, water lines, gas mains, petroleum pipelines, and other pipes carrying various types of materials.
- (b) Engineering standards for underground utilities in the flood plain are as follows:
- 1. The top of pipe or encasement shall be at least three feet below the invert of the watercourse. In special circumstances, such as hard rock bottoms, this may be reduced with the approval of the Department.
- 2. Sanitary sewer, petroleum product and gas lines shall be encased in six inches of concrete or a larger steel pipe for protection. A stainless steel plate, at least one-quarter inch thick, may be substituted for the top six inches of encasement if three feet of vertical clearance cannot be achieved. The encasement requirement may be waived by the Department if a minimum of four feet of cover is maintained for as long as the crossings are in use.
- 3. The crossing shall be horizontal under the watercourse, and the pipe or encasement shall extend a minimum of 10 feet beyond the top of banks. This requirement may be modified by the Department for good cause shown by the applicant

in cases in which the modification shall pose no additional risk to life or property either alone or taken in conjunction with the rest of the project.

- 4. The inclined leg of the crossing shall not be steeper than a ratio of one vertical to two horizontal, except as modified in writing by the Department for good cause shown by the applicant and in cases in which the modification shall pose no additional risk to life or property either taken alone or in conjunction with the rest of the project.
- 5. If manholes are to be located in the flood plain, the top of the manhole shall be flush with the ground. Sanitary sewer lines shall have a watertight cover.
- 6. For large or tidal watercourses, a cable may be laid directly on the watercourse bed. The cable shall be laid with slack so as to be readily moveable.
- 7. Utilities crossing over or under a piped reach of stream or culvert do not need to be encased but shall maintain a minimum one foot vertical distance above or below the pipe or culvert.
- (c) Environmental standards for underground utilities in the flood plain are as follows:
- 1. The width of trenches for installation of underground utilities shall be limited to the minimum necessary to permit installation. Upon installation of the utility, trenches outside the channel shall be backfilled to the pre-excavation ground elevation and planted with native species of vegetation. Trenches within the channel shall be backfilled to the pre-excavation ground elevation and stabilized in a manner that will mimic the characteristics and nature of the natural channel as closely as possible.

7:13-2.11 Aboveground utilities in the flood plain

- (a) Engineering standards for aboveground utilities in the flood plain are as follows:
- 1. Cables or pipes may be attached to a bridge at a point above the lowest member crossing the watercourse. However, if cables or pipes are located on the outside of a structure, the crossing shall be located on the downstream face of the structure, when at all possible. If the crossing must be located on the upstream face of the structure, the crossing shall be protected from damage due to impact with debris in the event of a flood.
- 2. Cables or pipes shall not be installed within a culvert or bridge opening except upon a determination by the Department that no other feasible location exists.

3. Crossings of cables or pipes over areas within the jurisdiction of this chapter shall be at least one foot above the regulatory flood elevation and shall be protected to prevent damage from impact with floating debris.

7:13-2.12 Dams

- (a) All dams and structures related thereto proposed to be located in areas under the jurisdiction of this chapter shall meet the standards in this section.
 - (b) Engineering standards are as follows:
- 1. Dams classified as Class I, II or III under the Dam Safety Standards, N.J.A.C. 7:20, which have received a Dam Safety Permit shall not be subject to any engineering review under this chapter.
- 2. The structural stability of dams is regulated pursuant to the Safe Dam Act, N.J.S.A. 58:4-1 et seq., and will not be reviewed under this chapter. All other applicable engineering standards of this chapter shall apply.
- 3. For the purpose of this chapter, off-channel dams and the resulting impoundments shall be considered as fill if constructed in the flood plain.
- 4. Any backwater created by an off-channel dam shall be contained within the applicant's property unless written consent is obtained from all affected property owners. The applicant shall advise the Department and all affected property owners of the anticipated effects of such backwater on both surface water and ground water.
 - (c) Environmental standards are as follows:
- 1. The environmental standards of this chapter shall apply to all dams proposed for construction in areas within the jurisdiction of this chapter.
- 2. It is unlawful to construct a dam in any water of this State which is a runway for migratory fish without installing a fish ladder or other contrivance to permit a fish to pass the dam in either direction (see N.J.S.A. 23:5-29-1).
- i. The determination of whether a watercourse is currently a runway for migratory fish is made by the Division of Fish, Game and Wildlife during the Department's review of an application for a permit under this chapter. Applicants are encouraged to discuss the matter with this program and the Division of Fish, Game and Wildlife prior to filing any application.
- 3. Low dams across trout-associated watercourses shall not be allowed unless the applicant demonstrates and the Department determines that there is a legitimate

need for the dam that cannot be accomplished in another fashion with less impact upon the environment.

7:13-2.13 Requirements for structures

- (a) Engineering standards for structures proposed to be located in areas within the jurisdiction of this subchapter are as follows:
- 1. All structures proposed to be located in areas within the jurisdiction of this chapter shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses (including hydrostatic and hydrodynamic) produced by flooding equal to the regulatory flood elevation, and the freeze/thaw cycle of the soil.
- 2. All structures within the channel shall be designed, connected and anchored to resist undermining caused by stream bed erosion and shall be designed in accordance with the "Standards for Soil Erosion and Sedimentation Control in New Jersey" or the latest amendment thereto, N.J.A.C. 2:90.
- 3. All hospitals, clinics, nursing homes, schools of any sort, day care centers, hotels, private residences and similar buildings which are proposed in areas under the jurisdiction of this chapter shall be elevated so that the lowest floor, including any basement, is at or above the regulatory flood elevation. This requirement applies to buildings proposed to be located on lands previously in the flood plain but legally filled after January 31, 1980, and raised above the regulatory flood elevation.
- 4. Any hospital, clinic, school of any sort, nursing home, day care center, hotel or other similar facility proposed to be built in, or which will require access through, areas under the jurisdiction of this chapter shall have at least one driveway or access route elevated to or above the regulatory flood elevation.
- 5. All proposed residential developments or subdivisions proposed to be built in, or which will require access through, areas under the jurisdiction of this chapter and which create more than one new residence shall, where feasible, have at least one driveway or access route at or above the regulatory flood elevation. If such a route is not feasible, then all on-site roads, parking areas and driveways shall be constructed at or above the regulatory flood elevation to the extent possible.
- 6. Driveways within the jurisdiction of this chapter which serve only one single-family residence shall be elevated at or above the regulatory flood elevation except as provided below. In the event the applicant homeowner or builder, as the case may be, refuses to comply with this requirement, the applicant shall acknowledge, in writing, the fact that the driveway may be inundated by floodwaters and damaged or destroyed, and said applicant shall cause the Deed of Record for that residence to state

that the driveway is subject to flooding and at what frequency storm the driveway will be inundated.

- 7. Except as stated below, all commercial and industrial structures, including water supply and wastewater treatment facilities proposed to be located in areas under the jurisdiction of this chapter, shall be elevated so that the lowest floor, including any basement, is at or above the regulatory flood elevation.
- i. The Department may exempt structures from this requirement upon written application by the owner or builder providing all evidence needed for the Department to reasonably conclude that raising the structure is economically or physically impracticable and that said structures is flood proofed up to the regulatory flood elevation.
- ii. The applicant shall submit a plan or document from a licensed professional engineer or architect certifying that the design described on the plans submitted to the Department conforms with the requirements of (a)7i above.
- 8. Recreation areas and non-residential parking lots proposed to be located within the jurisdiction of this chapter may be inundated by floods if the applicant demonstrates that no undue risk is posed to persons or property thereby and the applicant and/or owner posts a sign in a prominent location that the area is subject to flooding.
- 9. Applications for projects containing vertical retaining walls extending four feet or more above the watercourse bed or ground elevation at the base of the wall shall include a stability analysis of the wall calculated by a New Jersey licensed professional engineer.
- 7:13-2.14 Standards for fill within the flood plain
 - (a) Engineering standards for fill within the flood plain are as follows:
- 1. There shall be no fill in the floodway except as provided in N.J.A.C. 7:13-1.3(e). For regulated activities proposed in the flood fringe area, the volume of net fill to be placed on an applicant's property located in the flood fringe between the existing ground surface as of January 31, 1980, and the elevation of the regulatory flood is limited to 20 percent of the total volume of flood storage on that portion of the property.
- 2. The applicant shall submit engineering plans and calculations which demonstrate that the 20 percent net fill limit in (a)1 above shall not be exceeded as a result of any activity undertaken in connection with the proposed project.

- 3. All fill shall be graded in a manner so as not to adversely affect overland drainage flows.
- 4. Fill shall be placed so that slopes are not steeper than a ratio of two horizontal to one vertical.
- 5. Fill shall be compacted and stabilized in accordance with the "Standards for Soil Erosion and Sediment Control in New Jersey" or the latest amendment thereto, N.J.A.C. 2:90.
- 6. When a permit allows the placement of fill, any subsequent subdivision of that property shall not increase the total amount of fill allowable under the previous permit. Additional fill may be placed on the newly-divided property only to the extent that the total amount of fill under the previous permit has not been exceeded.
- 7. An exemption from the 20 percent net fill requirements of this section will be allowed for Federal, State, county or municipal highway or road projects that cannot meet the requirement due to limited right-of-way, provided that the applicant demonstrates to the Department's satisfaction that:
- i. There is a need for the project which can not be accomplished by any other means; and
- ii. The project has been designed so that the total volume of fill is minimized to the greatest extent possible.
- 8. The 20 percent net fill requirement is not applicable to projects whose primary purpose, according to the Department, is for flood control and have been so approved by the Department.
- 9. In cases where dikes, levees, floodwalls or other structures not approved as flood control projects by the Department impede the entry of flood waters into an area that previously acted as a flood storage area, the volume of the flood waters displaced shall be considered as solid fill for purposes of calculating compliance with the 20 percent net fill requirement.
- 10. When proposed channel modifications will lower the pre-project construction water surface, the Department shall consider the volume of flood storage lost as solid fill for the purpose of calculating compliance with the 20 percent net fill requirement.
- 7:13-2.15 Additional requirements for fill in the Central Passaic Basin
 - (a) Engineering standards for fill in the Central Passaic Basin are as follows:

- 1. In addition to the requirements of N.J.A.C. 7:13-2.14, any application proposing to place fill within the Central Passaic Basin shall create a volume of flood storage within the Central Passaic Basin equal in volume to the amount of fill proposed.
 - 2. Flood storage can be created by:
- i. Excavating an area in the Central Passaic Basin between the ground surface as of March 25, 1977, and the higher of the mean low water level of the adjacent watercourse or the seasonally-adjusted high groundwater level. The excavation area shall be graded so that flood waters will freely enter and exit; or
- ii. Completely removing fill and/or structures legally placed or constructed in the flood plain after March 25, 1977 so that flood waters may freely enter and exit.
- 3. An exemption from the zero net fill requirements of this section will be allowed for Federal, State, county or municipal highway or road projects that cannot meet the zero net fill requirement due to limited right-of-way, provided that the applicant demonstrates to the Department's satisfaction that:
- i. There is a need for the project which can not be accomplished by any other means; and
- ii. The project has been designed so that the total volume of fill proposed is minimized to the greatest extent possible.
- 4. The requirements of this section are not applicable to projects whose primary purpose, according to the Department, is for flood control and have been so approved by the Department.
- 5. In cases where dikes, levees, floodwalls or other structures not approved as flood control projects by the Department impede the entry of flood waters into an enclosed space, the volume of the enclosed space shall be considered as solid fill for the purposes of calculating compliance with the zero net fill requirement.
- 6. In order for the Department to approve any application proposing a net increase of fill in the Central Passaic Basin, a Stream Encroachment Permit for the corresponding excavation of material must have already been issued or, applied for and approved concurrently with the application made under this chapter.
- 7. No fill shall be placed within the Central Passaic Basin pursuant to any permit issued by the Department until the applicant has commenced creation of the flood storage mandated under the permit.

7:13-2.16 Bridges and culverts

- (a) Applications to construct bridges and culverts across water-courses will be reviewed in accordance with the criteria set forth in this section.
 - (b) Engineering standards are as follows:
- 1. New bridges and culverts that are not replacements or repairs shall be designed so that they will not increase the upstream water surface elevation off of the applicant's property by more than two-tenths of a foot during the regulatory flood. The applicant shall submit a standard step backwater analysis for existing and post-construction conditions in the affected water-course to determine upstream flood impact of any new bridge or culvert.
- i. The standard step analysis for existing conditions shall be calculated starting from the next control point downstream or if no control point is available, several hundred feet downstream with at least five cross-sections included before reaching the structure in question and continue upstream to at least the next upstream property or right-of-way limit.
- ii. The post-construction standard step backwater analysis shall begin at the upstream face of the new structure using a starting water surface elevation calculated by a separate analysis of the bridge or culvert.
- iii. If flood elevations are being calculated by a computer model based on the standard step backwater analysis, such as a HEC-2 model, then the bridge or culvert should be coded into the model as "recommended" in the model's documentation. If a computer model other than HEC-2 is used, complete documentation for the assumptions made by the model shall be submitted with the application, unless the Department advises the applicant that it is familiar with the model.
 - 2. Replacements or repairs of bridges and culverts shall be designed so that:
- i. If the size of the area open to the passage of floodwaters is decreased as a result of the construction of the structure, there shall be no increase to the upstream water surface outside the applicant's property during the regulatory flood. A standard step backwater analysis shall be performed for existing and post-construction conditions in the affected watercourse to determine the change in upstream water surfaces as a result of the construction of the proposed project. The analysis shall begin at the upstream face of the structure using a starting water surface elevation obtained through a separate analysis of existing and post-construction conditions of the affected watercourse.
- ii. If the size of the area open to the passage of floodwaters is increased as a result of the construction of the proposed structure, the structure shall be designed so

that the flow rate through the structure will not increase so as to cause increased flooding downstream off of the applicant's property during the regulatory flood. Documentation, which may include a detailed routing of the affected watercourse, shall be submitted to the Department to show that there is no downstream increase in flooding due to the increased area open to floodwaters. The routing shall continue to the next downstream control point.

- iii. If flood elevations are being calculated by a computer model such as HEC-1 (routing) or HEC-2 (standard step), then the bridge or culvert should be coded into the model as "recommended" in the model's documentation or the model may be stopped at the downstream face of the structure and resumed upstream of the structure with a water surface elevation calculated by a separate analysis of the structure. If a computer model other than HEC-1 or HEC-2 is used, the applicant shall submit to the Department complete documentation for all the assumptions made by the model unless the Department advises the applicant that it is familiar with the model.
- 3. Bridges and culverts, whether new or replacement, may be designed to be overtopped during the regulatory flood provided that:
- i. The applicant and landowner, as the case may be, submits to the Department a written acknowledgement of responsibility for damage to the structure by flood waters;
- ii. The structure is designed to remain stable and resistant to erosion during the regulatory flood; and
- iii. The structure meets the criteria above in (b)1 and 2 as well as the access requirements set forth in N.J.A.C. 7:13-2.13.
- 4. Channel transitions in excess of 100 feet in length upstream or downstream of the proposed bridge or culvert shall be considered channel modifications and shall meet the requirements of N.J.A.C. 7:13-2.9.
 - (c) Environmental standards are as follows:
- 1. New crossings over a watercourse shall span the flood plain unless the applicant demonstrates to the Department's satisfaction that such a design would be prohibitively expensive to construct and that no additional significant risk is created to persons or property downstream as a result of construction of the proposed design, considering the ability of the structure to withstand the regulatory flood.
 - 2. Channel transitions shall be minimized to the greatest extent possible.
- 3. Applicants seeking to construct any bridge or culvert, whether new or replacement, shall provide fish passage as described in N.J.A.C. 7:13-3.6(c) through

the culvert itself and within the upstream and downstream channel transition areas for those watercourses that are currently populated by fish on a seasonal or permanent basis or which are likely to be so inhabited in the future.

- i. Any channel created or modified as a result of construction of any bridge or culvert shall be designed and constructed so that during low flow conditions the water depth therein is at least as deep as in the existing channel except as provided in (c)3ii below;
- ii. Exceptions to the requirement in (c)3i above shall not be granted by any agency designated by the Department to supervise any aspect of the permiting or construction of any structure pursuant to this chapter. Requests for exemption from the requirements of section (c)3i above shall be submitted to and granted by the Department if:
- (1) The existing channel does not allow for the upstream passage of fish during low-flow conditions; or
- (2) Fish passage in the particular channel segment is irrelevant because of upstream or downstream conditions unfavorable to fish passage; or
- (3) Other conditions such as public need or extreme hardship make this requirement impracticable.
- 4. Maintenance of the existing watercourse bed shall be a priority in project design.
- 5. The use of standard box culverts in trout associated waters, in waters used by Anadromous fish, and in warm-water game fish waters shall be avoided and alternative methods shall be utilized where at all practicable. Alternative methods can include spanning the watercourse bed and watercourse banks, construction of an arched culvert where the existing watercourse bed remains undisturbed, and the use of an oversize culvert installed one foot below design grade with the natural substrate replaced over the concrete flooring and flush with the upstream and downstream watercourse inverts. Where the applicant proposes to place a natural substrate over the concrete floor of an oversize culvert, the applicant shall provide calculations to show that the substrate will remain stable.

7:13-2.17 Sewage disposal requirements in the flood fringe

Individual or community subsurface sewage disposal systems within the flood fringe area shall be constructed in accordance with Department's Standards for Individual Subsurface Sewage Disposal Systems, N.J.A.C. 7:9A.

7:13-2.18 Impacts to other properties

- (a) Unless the owners of property located either upstream and/ or downstream of the project site accept liability for any damages or inconveniences that may occur as a result of the proposed project and written proof of such an agreement is presented to the Department, the applicant shall design and construct the project so that the following conditions are satisfied:
- 1. The project shall not increase the flood elevation upstream or downstream of the property on which the project is located by more than two-tenths of a foot if the applicant's property includes the flood plain on both sides of the water body, or by more than one-tenth of a foot if the applicant's property is only on one side of the waterbody.
- i. This limitation shall not apply to replacement bridges or culverts, which must be designed so that there is no increase to the flood elevation upstream from the project;
- 2. No portion of the proposed project shall be located on property other than that owned by the applicant unless specific written consent from the property owner to perform the work and accepting liability for any damages or inconveniences that may occur as a result of the work is presented to the Department; and
- 3. The project is designed so that a concentrated flow of storm water is not discharged across properties adjacent to those owned by the applicant.
- (b) The applicant shall provide the Department with calculations describing both existing and post-construction flood elevations on the subject property and adjacent properties upstream and downstream of the proposed project.
- 1. The applicant shall submit a standard step backwater analysis to the Department to show the impacts to upstream flood elevations from the regulated activities. The analysis shall extend at least 100 feet beyond the applicant's upstream property limit.
- 2. The applicant shall submit a detailed stream routing analysis to the Department to show impacts to downstream flood elevations from the regulated activities. The analysis shall extend at least 100 feet beyond the applicant's downstream property limit.
- 3. If the applicant chooses to rely upon a computer model other than HEC-1, TR-20, WSP2 or HEC-2 for any portion of the application to the Department, the applicant shall include all supporting documentation describing the assumptions underlying each model or computer program used, unless the Department advises the applicant that it is familiar with each computer model the applicant has submitted.

Subchapter 3. General Environmental Standards

7:13-3.1 General

- (a) The standards of this subchapter apply along all watercourses under the jurisdiction of this chapter regardless of the drainage area, except along man-made, but not man-altered, watercourses with a total contributory drainage area less than 50 acres or as otherwise indicated in this subchapter or expressly waived by the Department pursuant to the provisions of this chapter.
 - (b) Minimization of environmental damage shall be as follows:
- 1. The applicant shall describe to the Department all steps taken by the applicant to minimize pollution, impairment or destruction of the environment within the areas under the jurisdiction of this chapter, during both construction and operation of the project, describing short and long-term environmental impacts and describing the cumulative impacts of each upon the environment.
- 2. All projects regulated under this chapter shall be designed in accordance with Federal, State and local statutes, regulations, and ordinances.
- 3. The Department will not approve any regulated activity which it determines is likely to significantly and adversely affect the biota of the watercourse or its water quality including, but not limited to, adverse effects on potable water supplies, flooding, drainage, channel stability, threatened and endangered species of plants and animals or upon their current or documented historic habitats, navigation, energy production, municipal, industrial or agricultural water supplies and fisheries.
 7:13-3.2 Protection of near watercourse vegetation
- (a) Trees, shrubs, grasses, and other existing vegetation located within 25 feet of the top of the channel bank, or within 50 feet of the top of the channel bank in the areas listed in N.J.A.C. 7:13-1.3(a)3, shall not be disturbed unless an applicant has demonstrated to the satisfaction of the Department that there is no alternative to the proposed project design which will eliminate or further minimize the disturbance and the applicant has submitted a plan to compensate or cure the effects of the disturbance which is acceptable to the Department. Among other environmental factors, the applicant shall address the effects of the removal of vegetation on water quality and the effect of sedimentation or erosion on the biota of the watercourse. Trees shall be left standing, and bushes and stumps shall not be removed, except as expressly allowed by the Department. Access roads to work sites shall not be constructed within the areas specified above unless no feasible alternative to such an access road exists.
- (b) Vegetative debris from construction shall not be disposed of in the floodway. This prohibition shall not apply to vegetative mulches applied for soil erosion and

sediment control or for agricultural purposes. However, waste mulch not serving to control erosion or sediment shall not be disposed of in channels.

7:13-3.3 Soil erosion and sediment control

- (a) All applications for permits pursuant to this chapter shall describe soil erosion and sediment control measures to control and minimize disturbance of any surface area under the jurisdiction of this chapter during construction and use of the proposed structure.
- (b) In planning soil erosion and sediment control measures, applicants for permits under this chapter shall be guided by the latest revised version of the "Standards for Soil Erosion and Sediment Control in New Jersey" promulgated by the New Jersey State Soil Conservation Committee pursuant to the Soil Erosion and Sediment Control Act of 1975 as amended, N.J.S.A. 4:24-42 et seq. and N.J.A.C. 2:90. The Department recommends the use of Geotechnical materials to stabilize disturbed areas, whenever possible.
- (c) The applicant shall meet the following additional soil erosion and sediment control requirements:
- 1. The area of soil disturbance shall be no larger than that which is absolutely necessary for the construction of the project;
- 2. Applicants shall provide the Department with soil disturbance plans which minimize the exposure of soils to erosion to the greatest extent possible;
- 3. If erosion and sediment control measures such as diversions, sediment basins, or sediment barriers (the purpose of which is to divert surface runoff before it reaches exposed soil or to intercept sediment eroded from exposed soil) are part of the erosion and sediment control plan for the project, such measures shall be implemented prior to any major soil disturbance or in their Department approved sequence with respect to other phases of the project in order to minimize sediment delivery to waterways. All soil erosion and sediment control practices shall be left in place and maintained until the soil is stabilized by vegetation or engineering measures;
- 4. Disturbed soil on the banks of waterways shall be protected within 48 hours of disturbance by rip-rap, sandbags, sod, or Department-approved mulch netting, as conditions warrant, in accordance with the "Standards for Soil Erosion and Sediment Control."
- i. Asphalt or other liquid binders shall not be applied for the purpose of anchoring mulch along the banks of a watercourse.

- ii. Neither calcium chloride nor any spray-on adhesive shall be applied for dust control along the banks of a watercourse;
- 5. In areas where vegetative methods (including "mulch only") are relied upon for erosion and sediment control without down-slope controls to intercept sediment (such as sediment basins or sediment barriers), the applicant shall seed, mulch, or place sod within 48 hours of soil exposure in accordance with the "Standards for Soil Erosion and Sediment Control." Seeding shall always be accompanied by mulching and adequate watering.
- i. If weather conditions are unfavorable for successful seeding, sod placement or the establishment of vegetation, the area shall be mulched within 48 hours of soil exposure in accordance with the "Standards for Stabilization with Mulch Only" in the "Standards for Soil Erosion and Sediment Control."
- ii. In areas without downslope sediment controls, slopes exceeding 15 percent gradient shall be protected within 48 hours of soil exposure by special treatment, such as water diversion berms, sodding or Department-approved mulch netting, in accordance with the "Standards for Soil Erosion and Sediment Control"; and
- 6. Sediment-laden water ("pumpage") from the dewatering of trenches or other excavations shall not be pumped directly into waterways or wetlands without treatment except as expressly approved by the Department.
- i. Pumpage shall be piped to sediment basins or sediment barriers that meet the "Standards for Soil Erosion and Sediment Control." Mechanical filtration or sedimentation devices shall be used to minimize the discharge of sediment into waterways.
- ii. Pump intakes shall be placed near the water surface to minimize the sediment content of pumpage.
- iii. Upon good cause shown by the applicant why the foregoing requirements cannot feasibly be met, the Department may permit pumpage to be spread onto land located as far from the watercourse bank as possible, provided that the applicant avoids damage to trees not approved for removal by the Department.
- (d) When a Soil Conservation District or exempt public entity certifies that a sediment and soil erosion plan meets both the "Standards for Soil Erosion and Sediment Control in New Jersey" and the additional requirements contained in this section, the Department or designated agent shall accept this certification as proof that the plan satisfies the requirements of this section.

7:13-3.4 Mitigation

- (a) As a condition to the issuance of all permits under this chapter, permittees are required to take all measures necessary to minimize adverse environmental impacts to the receiving watercourse and areas under the jurisdiction of this chapter arising from the construction and use of the proposed project, and to restore temporarily disturbed vegetation, habitats, and land and water features to their pre-construction condition, and to prevent sedimentation and erosion to the greatest extent possible. The applicant shall submit a plan for the review and approval of the Department by which the applicant shall restore any area temporarily disturbed by the construction of the proposed project with vegetation of equal or higher quality than that which existed on the site before construction, whether said disturbance was approved by the Department pursuant to a permit under this chapter, or not.
- (b) Mitigation described in (a) above shall be performed immediately after activities that will temporarily disturb the environment.
- (c) The Department shall not consider a mitigation proposal in determining whether an applicant should be awarded a permit, but it shall require mitigation as a condition of any permit it awards under this chapter.

7:13-3.5 Projects along trout associated watercourses

- (a) The removal of trees and shrubs within 50 feet of the top of bank of a trout-associated watercourses is prohibited unless the applicant demonstrates that there is absolutely no other alternative to the removal of the vegetation in order to accomplish an essential part of the project. If the Department allows the removal of trees and shrubs, the applicant shall remove such vegetation from the most northerly or easterly bank of the watercourse affected by the project, rather than the southerly or westerly bank, unless expressly approved by the Department in writing.
- (b) Construction equipment shall not be placed or operated in a trout-associated watercourse unless the Department issues a written determination that certain specific uses are absolutely necessary to accomplish an essential aspect of the project. Fording watercourses with construction equipment is permitted only where the watercourse bottom is firm, the approaches are stable, and such activity does not create bank erosion not already described by the applicant and incorporated into the applicant's erosion and sediment control plan already approved by the Department.
- 1. The Department may require the applicant to construct temporary bridges or culverts if equipment crossings of watercourses are necessary in areas which fail to meet the requirements of the preceding section.

- 2. All crossings of watercourses shall be made at right angles to the watercourse and the applicant shall take all measures necessary to ensure that no petroleum products or sediment is washed into the watercourse as a result of the crossing.
- 3. Any watercourse bank that is disturbed shall be stabilized within 48 hours in accordance with the requirements of this chapter in order to minimize the potential for erosion.
- (c) Construction equipment shall not be washed in trout-associated watercourses or where wash water would drain as surface runoff into such watercourses.
- (d) Unless modified with the express written approval of the Department, any development proposed in areas under the jurisdiction of this chapter which, in the opinion of the Department, could introduce sediment into the watercourse or which could cause an increase in the natural level of turbidity in the watercourse shall comply with the following requirements:
- 1. All regulated activities located within 50 feet of the top of bank along trout associated watercourses which would introduce sediment into the watercourse or otherwise increase the turbidity in the watercourse are prohibited during the following periods critical to spawning along such waters as identified in the Department report, "Classification of New Jersey Waters as Related to Their Suitability for Trout":
- i. Brook Trout/Brown Trout Production Watercourses: September 15 through March 15 inclusive:
- ii. Rainbow Trout Production Watercourses: February 1 through April 30, inclusive;
- iii. Projects authorized pursuant to this chapter which are located along trout production watercourses shall suspend all construction activity during the period of September 15 through March 15, inclusive;
- iv. Projects authorized pursuant to this chapter which are located along trout-stocked watercourses, or one mile or less upstream from trout-stocked and trout maintenance watercourses shall suspend all construction activity during the period of March 15 through June 15, inclusive.
- 2. Upon application by the permittee, the Department may specifically modify the requirements above for the following reasons:
- i. Cases in which the Department determines that the likelihood of particular types of damage to trout-associated watercourses from the particular activity proposed by the permittee during the period of low flow in the June 1 through June 15 period

would be less than the likelihood of particular types of damage arising from such activities in these watercourses at higher flows during other periods of the year;

- ii. In cases where the combined effect of compliance with this subsection, N.J.A.C. 7:13-3.6(a) and 3.6(b) would restrict construction to less than 183 days of a calendar year, the applicant shall describe for review and approval by the Department those specific steps to be implemented to minimize the impact of construction activity upon the affected watercourse and upon approval of such a plan the Department shall allow construction activity to continue for no more than 183 days of each year on the days specified in the applicant's plan; and
- iii. In cases which the Department determines that construction must be undertaken during non-school periods in order to avoid unacceptable risk or excessive delay to school buses or vans.
- (e) The mining of bottom material from a trout-associated watercourse is prohibited. This does not prohibit the incidental use or sale of watercourse bottom material removed during the course of Department-approved channelization, watercourse cleaning or other regulated activities authorized by the Department and performed for purposes other than mining.
- (f) Where logs or boulders create pools or riffles that provide fish habitat, removal of such logs or boulders is prohibited unless the Department determines that their removal is necessary to accomplish an essential aspect of the project.
- (g) Channelization of trout-associated watercourses is prohibited unless the Department determines that:
- 1. There is a compelling public need for the proposed project greater than the need to preserve the natural condition of the channels of such watercourses and that need cannot be met by essentially similar projects in the region which are under construction or expansion or which have already received the necessary governmental permits and approvals and the project cannot be accomplished in a less-destructive manner; and
 - 2. The project meets the requirements of (h) and (i) below.
- (h) Any application for channelization of a trout-associated watercourse shall include a map of the existing watercourse channel that identifies the location, dimensions and area of cascades, riffles, flats and pools, except as follows:
- 1. Channel modification directly and inextricably linked to the construction or maintenance of bridges or culverts, including transition zones up to 100 feet upstream or downstream from such bridges or culverts;

- 2. Minor bank re-establishment or bank protection projects limited to 100 feet of channel length; or
- 3. Other projects which require 100 feet or less of channel modification including, but not limited to sewer headwalls, sewer outlet works, sewer outlet diffusers, minor water intake facilities and channel crossings of utilities.
- (i) A new or modified channel of a watercourse shall be designed and constructed in such a manner as to duplicate or preserve the pre-construction character of the channel including proportion of shading, pools, flats, riffles and cascades and, particularly in the case of trout associated watercourses, areas for fish cover and shelter.
- (j) Channel modifications at bridges and culverts (including the upstream and downstream transition zones), channelization projects, watercourse cleaning projects, and other channel modifications (excluding dams) shall comply with the following fish passage requirements;
- 1. Any new or modified channel of a watercourse shall be designed and constructed so that, during low-flow conditions, the water depth is at least as deep as in the pre-construction channel unless the Department allows an exception to this requirement pursuant to (j)2 below.
- 2. No exception to (j)1 above shall be allowed by any delegated agency. The Department will allow an exception to (j)1 above if:
- i. The pre-construction channel does not allow for the upstream passage of fish during low-flow conditions;
- ii. Conditions upstream or downstream of the channel modification are unfavorable to fish passage; or
- iii. The Department determines that other circumstances, such as public need for the project or exceptional and undue hardship for the applicant, warrant such an exception.

7:13-3.6 Projects affecting other fish resources

(a) Construction activities that would introduce sediment into the watercourse or otherwise increase the turbidity in the watercourse within 50 feet of the banks of watercourses which support anadromous fish are prohibited during the following periods:

- 1. For projects on waters identified as anadromous migratory pathways (watercourses): April 1 to June 30, inclusive; and
- 2. For projects on waters used by American Shad for migrations on the Delaware River System:
- i. Mouth of bay to Delaware Memorial Bridge and tidal Maurice River: March 1 through June 30 and October 1 through November 30;
- ii. Delaware Memorial Bridge to New York State line and the tidal portions of Rancocas and Raccoon Creeks: April 1 through June 30 and September 1 through November 30;
- iii. Timing restrictions for formerly-native or introduced fish species, such as, but not limited to, the Atlantic Salmon, Chinoock Salmon, or Coho Salmon which may or will in the future be reintroduced to State waters, will be developed as those species become established.
- (b) Construction activities which would introduce sediment into the watercourse or otherwise increase the turbidity in the watercourse, within 25 feet of the banks of waterbodies identified as supporting warm-water fish including but not limited to smallmouth bass, largemouth bass, pickerel, walleye and yellow perch shall be prohibited during the following periods:
 - 1. Waterbodies supporting general game fish: May 1 to June 30 inclusive;
 - 2. Waterbodies supporting pickerel: Ice Out to April 30 inclusive; and
 - 3. Waterbodies supporting walleye: March 1 to May 30 inclusive.
- (c) Channel modifications at bridges and culverts (including their upstream and downstream transition zones), channelization projects, watercourse cleaning projects, and other channel modifications (excluding dams) shall comply with the following fish passage requirements:
- 1. Any new or modified channel of a watercourse shall be designed and constructed so that, during low-flow conditions, the water depth is at least as deep as in the pre-construction channel unless the Department allows an exception to this requirement pursuant to (c)2 below.
- 2. No exception to (c)1 above shall be allowed by any delegated agency. The Department will allow an exception to (c)1 above if:

- i. The pre-construction channel does not allow for the upstream passage of fish during low-flow conditions;
- ii. Conditions upstream or downstream of the channel modification are unfavorable to fish passage; or
- iii. The Department determines that other circumstances such as public need for the project or exceptional and undue hardship for the applicant warrant such an exception.
- (d) Channelization of watercourses supporting the fisheries resources described in this section is prohibited unless the Department determines that:
- 1. There is a compelling public need for the proposed project greater than the need to preserve the natural condition of the channels of such watercourses and that need cannot be met by essentially similar projects in the region which are under construction or expansion or which have already received the necessary governmental permits and approvals and the project cannot be accomplished in a less-destructive manner; and
 - 2. The requirements of (e) and (f) below are met.
- (e) Any application for channelization of a watercourse which supports the fisheries resources described in this section shall include a map of the existing watercourse channel that identifies the location, dimensions and area of cascades, riffles, flats and pools, except as follows:
- 1. Channel modification directly and inextricably linked to the construction or maintenance of bridges or culverts, including transition zones up to 100 feet upstream or downstream from such bridges or culverts;
- 2. Minor bank re-establishment or bank protection projects limited to 100 feet of channel length; or
- 3. Other projects which require 100 feet or less of channel modification including, but not limited to sewer headwalls, sewer outlet works, sewer outlet diffusers, minor water intake facilities and channel crossings of utilities.
- (f) The new or modified channel of a watercourse shall be designed and constructed in such a manner as to duplicate or preserve the pre-construction character of the channel including proportion of shading, pools, flats, riffles and cascades and areas for fish cover and shelter.
- 7:13-3.7 Projects exposing deposits of acid-producing soils

- (a) The requirements of this section apply only to deposits of acid-producing soils that are sometimes found in the following Coastal Plain geologic formations:
 - 1. Raritan Formation;
 - 2. Magothy Formation;
 - 3. Merchantville Formation;
 - 4. Woodbury Clay;
 - 5. Englishtown Sand;
 - 6. Marshalltown Formation:
 - 7. Navesink Formation:
 - 8. Red Bank Sand; and
 - 9. Kirkwood Formation.
- (b) The map showing the general location of these deposits can be found in the Technical Manual.
- (c) The requirements of the section are applicable to projects under the jurisdiction of this chapter which shall affect deposits of acid-producing soil, whether or not encroachments are classified as "major" or "minor" in the 90-Day Construction Permit Rules (N.J.A.C. 7:1C).
- (d) Where it is known in advance that deposits of acid-producing soils would be exposed by the proposed regulated activity, the application for a permit under this chapter shall include a written site evaluation prepared by a professional which identifies the extent of exposure, the applicant's plan to mitigate the impacts of such exposure, and the result of the special laboratory analysis of the soils, if required by (g) below.
- (e) If, after the Department determines an application under this chapter complete for review, the Department or the applicant determines that deposits of acid-producing soils would be or have been exposed by the regulated activity, the Department may, time permitting, permit the applicant to amend the application by submitting a site evaluation and mitigation plan as described above within a time stipulated in writing by the Department, or deny the application on its merits. Ammended applications may be submitted in accordance with N.J.A.C. 7:13-4.7(g).
- (f) If construction activity (pursuant to a permit issued under this chapter or otherwise) reveals deposits of acid-producing soils not described to the Department in an application for a permit to conduct regulated activities at the location containing such soils, the Department shall order the permittee, or other person as the case may be, to desist from further exposure of acid-producing deposits and to apply Department-specified mitigation measures to deposits already exposed, pending the Department's review and approval of a site mitigation and evaluation plan, and an application for a permit under this chapter, as the case may be.

- (g) Special laboratory analysis requirements are as follows:
- 1. If the Department determines that deposits of acid-producing soils have been or will likely be exposed as a result of regulated activities proposed by an applicant, or as a result of activities undertaken by a permittee or undertaken illegally by a person who has not yet applied for a permit under this chapter, and the Department determines that it requires more information about characteristics of such deposits to approve or disapprove an application to conduct such regulated activities, the Department may require the permittee, or applicant as the case may be, to include in its site evaluation and mitigation plan the following chemical analysis of samples of deposits taken from pre-construction borings along the relevant sections of the watercourse channel or flood plain as stipulated by the Department. The following tests shall be performed by a State-certified Laboratory, using methods specified in the Technical Manual:
 - i. pH;
 - ii. Cation exchange capacity;
 - iii. Exchangeable cation content;
 - iv. Potential acidity; and
 - v. Extractable metals (Fe, Al, Mn, Cu, Zn, Ni, Cr, Cd, Pb) and sulfate.
- 2. The Department may also require laboratory analysis of physical characteristics of the soil. These chemical and physical tests shall be performed by a State-certified laboratory employed by the permittee or the applicant, as the case may be, in accordance with procedures specified by the Department in the Technical Manual. In the event an order has been issued stopping activities regulated pursuant to this chapter, no such activity may commence until the Department reviews the test results required under this section and approves an application under this section including the site evaluation and mitigation plan.
- (h) When acid-producing deposits are to be or have been exposed, mitigation measures shall be taken by the person engaging in the regulated activity, including:
 - 1. Minimizing the area and time of exposure of acid-producing soils;
- 2. Minimizing the spread or mixing of acid-producing soils onto or into soil free of such deposits and controlling the disposal of such deposits inside or outside the flood plain:
- 3. Covering deposits of acid-producing soils with limestone and non-acid-producing soil to permit the establishment of vegetation; and
- 4. Providing prompt, temporary and permanent stabilization of areas where acid-producing soils are exposed.
- (i) When acid-producing soils are exposed within a watercourse channel or along watercourse banks within the jurisdiction of this chapter as the result of activities regulated under this chapter, the person engaging in such activities shall undertake mitigation measures in order to:
 - 1. Minimize the area and time of exposure;

- 2. Neutralize acid generated in the brief period of exposure; and
- 3. Keep post-construction oxidation rates from exceeding pre-exposure oxidation rates.

7:13-3.8 Freshwater wetlands

- (a) Any disturbance of the vegetation or soil of more than one-quarter acre of freshwater wetlands located within the jurisdiction of this chapter contiguous to the watercourse constitutes a significant and adverse impact on the biota of the watercourse. A permit application which proposes such a disturbance shall not be approved by the Department unless the applicant demonstrates to the Department's satisfaction that:
- 1. The disturbance is absolutely necessary to construct the project or that the project cannot be redesigned to reduce or eliminate the disturbance and still meet the objective and purpose of the project; and
- 2. That effective measures shall be taken by the applicant to mitigate or replace wetlands to be disturbed or destroyed with wetlands of the same or higher quality.
- (b) This section shall apply only to those areas located within the Hackensack Meadowlands Development Area.

7:13-3.9 Threatened and endangered species

- (a) In addition to the other requirements set forth in this chapter, the Department shall issue a permit for an activity regulated under this chapter only if the activity will not adversely affect populations of species of threatened or endangered plants or animals documented in the areas under the jurisdiction of this chapter which are critically dependent on the watercourse to survive, and will not adversely affect their habitats located within the jurisdiction of this chapter, which habitats are either currently occupied by species of threatened or endangered plants or animals, or which are documented, historic habitat for threatened or endangered species of plants or animals and which remain suitable for breeding, resting, or feeding by those species of animal during any portion of their life-cycle. A survey for threatened and endangered species may be required if the proposed project will disturb an area documented to contain a threatened and endangered species, or nearby areas in which the habitat that can support these species is present. Persons seeking information pertaining to threatened and endangered species occurrences on or near a project site may contact the "Natural Heritage Program", CN 404, Trenton, N.J. 08625-0404 (fee required).
- (b) Those persons undertaking threatened and endangered plant or animal surveys/assessments on behalf of an applicant for a permit under this chapter shall

possess the education and experience in wildlife biology, zoology or botany necessary to perform the required surveys/assessments. The Department may request additional information and/or surveys/assessments if it finds the surveys/assessments inadequate or that the minimum data have not been supplied. Threatened and endangered species surveys/assessments shall include the following data:

- 1. The name and address of all persons participating in the survey, the date and time of the investigation including total number of hours spent by each individual specifically for species observation, and the number of observers present on the site at any one time, including their location on the site relative to one another;
- 2. The site conditions during the survey and observation, that is, precipitation, wind speed and direction, and temperature, artificial or natural noises, nearest human activity or development to site, aside from the observers listed in (b)1 above;
- 3. The method and specifics of species sightings, indicating whether the subject was sighted directly or identified by call, track, scat, remains or other indirect evidence of presence, the date and time of each such sighting or discovery of evidence, and the relative age and condition of any indirect evidence observed and its location on the property. If the species is observed directly, note the number of individuals, activity of each when observed, each individual's sex and age, location of each individual observed on or near the project site, as the case may be, and the distance between the animals and the observer at each sighting;
- 4. A description of the techniques and methodology(s) employed by the observer during the site investigation;
- 5. The acreage of the surveyed area and breakdown of acreage as per habitat/cover type shown on the USGS Quadrangle map and NWI maps with site boundaries delineated:
- 6. A description of each habitat and cover type on site including vegetation, hydrology, soils and natural communities. These habitats shall be assessed for suitability and compatibility to the life history of the target species. If no target species are observed, a discussion of the site's suitability for the species shall be provided.
- (c) If, while reviewing the merits of an application deemed complete for review without a threatened and endangered species survey/assessment, the Department determines that the project or its construction would significantly damage or destroy threatened and endangered plants or animals or their current or historic habitats the Department shall, time permitting, either request the applicant to submit a threatened and endangered species survey to the Department within the time stipulated by the Department in accordance with the criteria outlined in (b) above or deny the application on its merits. Amended applications may be submitted pursuant to N.J.A.C. 7:13-4.7(g).

Subchapter 4. Application Procedure for Stream Encroachment Permits

7:13-4.1 Required information for all applications submitted to the Department

- (a) The Land Use Regulation Program (LURP) permit application form shall be completed by the applicant or the applicant's authorized agent including all signatures and seals. Notarization is not necessary.
- (b) The Engineering Data Sheet shall be completed and all required information for the type of project shall be supplied along with a copy of the completion check list and, where applicable, a copy of any pre-application conference minutes.
- (c) The fee as required by the 90-Day Construction Permit Rules (N.J.A.C. 7:1C) shall be included with all applications for permits.
 - (d) Certification of notification required by N.J.A.C. 7:13-4.2 shall be submitted.
- (e) Six sets of plans prepared in accordance with the requirements of this chapter outlined on the Engineering Data Sheet shall be submitted.
 - (f) A Soil Erosion and Sediment Control Plan shall be submitted.
 - (g) Two sets of color photographs showing the work area shall be submitted.
- (h) Except for applications by public entities which have asserted the right of eminent domain, the applicant shall provide evidence of easements or other property owner's permission for any work outside the applicant's property or which will physically affect properties not owned or controlled by the applicant.
- (i) Any application made pursuant to this chapter affecting any land within the Pinelands Area as defined in N.J.S.A. 13:18A-11 is not complete for review until the applicant submits to the Department a Certificate of Filing, a Certificate of Compliance or an Resolution of Approval from the Pinelands Commission for the proposed development and proposed activities on that land.
- (j) Three copies of an environmental report bound or in loose-leaf form, on 82 by 11 inch paper shall be submitted to the Department. All maps, plans and aerial photographs shall contain a north arrow, graphic scale, date of preparation, name of author, and source of information. The report shall contain a detailed environmental inventory and assessment which describes and documents in narrative and map form (including Soil Conservation Service soil maps) possible short and long term effects of each proposed activity upon the site as well as upon adjacent areas upstream and

downstream. To the extent required to meet the requirements of this chapter, the report shall include:

- 1. A description of the scope and nature of the proposed activity including reasons why the proposed structures and their location are the most appropriate for the site and why they minimize to the greatest extent possible any adverse affects upon the pre-construction character of the site located within the jurisdiction of this chapter. The report shall also describe and analyze alternatives to the proposed activity, including the no-build option;
- 2. Temporary and permanent physical changes to the site which would result from the proposed activity and the impact of these changes on the areas within the jurisdiction of this chapter and the adjacent properties, including details regarding:
- i. The effect of the project on public health, safety, and welfare; water quality and quantity; flood storage; existing and potential water uses; parks and/or preserves; vegetation, wildlife, and fisheries, including threatened and endangered species;
- ii. All measures to be taken during construction and thereafter to reduce detrimental on-site and off-site effects of both construction and use of the structure in question; and
 - iii. Adverse environmental impacts which cannot be avoided or mitigated;
 - 3. Project location using the State plane coordinate system;
- 4. For encroachments along trout-associated watercourses, the environmental report shall identify:
- i. The method for disposing of sediment-laden pumpage from dewatering operations;
 - ii. Channel segments along which trees or shrubs shall be removed; and
- iii. Places where construction vehicles shall operate on the banks of trout-associated watercourses and the physical character of the watercourse bed at such places;
- 5. For all proposed detention and retention basins under the jurisdiction of this chapter, the applicant's environmental report shall address the effects of the basin on the watercourse habitat (that is, what plants and animals will be disturbed or displaced, the degree of destruction or disturbance and how these effects shall be mitigated or remedied by the applicant), and whether or not the basin will contribute to or constitute a breeding habitat for mosquitoes;

- 6. A site evaluation and mitigation plan for acid-producing soils, where applicable;
- 7. A threatened and endangered animal and plant survey or habitat suitability assessment; and
- 8. An Environmental Report, prepared using an interdisciplinary approach, containing the identity and qualifications of the persons who prepared each element of the report. References to data, reports or treatises not contained completely in the Environmental Report shall be cited throughout the text as appropriate, and in a consistent manner. Complete copies of all documents cited in the report shall be made available to Department personnel, at the applicant's expense, upon reasonable advance notice.
- (k) If applicable, the application shall include the date on which the proposed application was preconferenced with the Department pursuant to N.J.A.C. 7:13-4.3, and the name of the Department personnel who preconferenced the application.
- (I) Any application which does not contain the information required in this section shall be considered incomplete and ineligible for review, or alternatively, shall be denied.

7:13-4.2 Notice

- (a) The applicant shall provide notice to those persons described in (a)1 to 5 below, of the filing of an application for a permit under this chapter for projects considered a major project under the 90-Day Construction Permit Rules (N.J.A.C. 7:1C), for projects along trout associated watercourses, for projects exposing acid-producing soils, for projects requesting a hardship exemption and for an appeal of the Department's decision on an application deemed complete for review. The notice shall include a description of the nature and location of the proposed project, data on the application, (a copy of the completed Land Use Regulation Program (LURP) permit application form will be acceptable to fulfill these requirements) and a request that written comments be sent to the Department at the address stipulated at N.J.A.C. 7:13-1.5. The notice shall be sent to the following agencies and individuals:
- 1. The municipal planning board, engineer, construction official, environmental commission and clerk's office of the municipality in which the project is located. Also the municipality across the watercourse and the municipality next downstream on both sides of the waterway, if within one mile of the project must be notified;
- 2. All property owners within 200 feet of the legal boundary of the property or properties on which the project shall be constructed;

- 3. The county planning board, county engineer, county environmental commission and county mosquito control commission;
 - 4. The local county Soil Conservation District; and
 - 5. Any other agencies or bodies as requested by the Department or the county.
- (b) If the proposed project is a linear facility such as a pipeline or road of more than one-half mile within the jurisdiction of this chapter and requires notices pursuant to (a) above, instead of notifying all property owners within 200 feet of the property lines, the applicant may instead give public notice of the filing of the application in at least one newspaper of local circulation and one newspaper of regional circulation in the municipality in which the property on which the proposed project is located. In addition, notice shall be given to the owners of all real property within 200 feet of any above-surface structure related to the linear facility, such as pumping stations, treatment plants, power substations, grade separated interchanges or similar structures (not including utility support structures or conveyance lines) which are also located within the jurisdiction of this chapter.

7:13-4.3 Pre-Application conference

- (a) A pre-application conference is not required of the applicant but is highly recommended. Department staff will advise the applicant of the areas in which the project may or may not comply with the requirements of this chapter, but under no circumstances shall any discussion at such a meeting compel or estop the Department from approving or denying any application submitted to it for a permit under this chapter.
- (b) Pre-application conference requests shall be made in writing by the applicant or its authorized agent and directed to the chief of the region in which the proposed project shall be located at the address stipulated in N.J.A.C. 7:13-1.5. The request shall include sufficient maps, plans, photographs, surveys or other related information to allow the Department to identify major areas of concern under the regulations which might apply to the project.
- (c) All applications for permits submitted as a result of such conferences shall list the date of the conference(s) and parties present at each such conference.
- (d) A pre-application conference may also be used to deliver an application to the Department to be checked for administrative completeness.
- (e) If the proposed project will require other permits from the Department, it is strongly recommended that the applicant first contact the Office of Permit Information and Assistance before filing any single permit application in order to properly coordinate the entire permitting process.

7:13-4.4 Over-the-counter permit processing

One day permit processing is available for certain minor applications to the extent provided for in the 90-Day Construction Permit Rules (N.J.A.C. 7:1C), Department workload permitting.

7:13-4.5 Optional Soil Conservation District review

Certain farming practices which would otherwise constitute regulated activities may be reviewed by the local Soil Conservation District as authorized by the agreement between the Department and the State Soil Conservation Committee in September 1978, entitled "Stream Encroachment Permit Procedures for Soil Conservation District Projects" and any subsequent amendments thereto. A recommendation of approval from the Soil Conservation District under the authority conferred upon the District in this agreement and the engineering plans relied upon by the District in making its recommendation shall be forwarded to the Department.

7:13-4.6 Emergency permit

- (a) The Department may issue an emergency permit for a regulated activity only if:
- 1. Severe environmental degradation will occur or an undue and immediate risk of loss of life or substantial loss of property is more probable than not if the permit is not granted; and
- 2. There is a high probability that the anticipated threat or loss will occur before the Department can review an application and issue a permit under procedures otherwise required by the Acts, this chapter and other applicable State laws.
- (b) The emergency permit shall incorporate the regulatory standards and criteria for non-emergency uses to the greatest extent permissible under the circumstances unique to the site.
 - (c) Persons applying for an emergency permit shall:
- 1. Inform the Department by telephone (and if possible facsimile letter) of the nature and extent of work to be performed, the nature and reason for the emergency, the period of time the applicant knew of the circumstances which underlie the emergency, the precise location of the proposed work, the identity of the property owner and whether said owner has given his or her permission for the work to be done;

- 2. Expeditiously perform the emergency work permitted authorized by the program Administrator or his or her acting designate and advise all planning boards, authorities and nearby property owners, as described in N.J.A.C. 7:13-4.2(a), of the work as soon as possible. The applicant shall also immediately advise the Administrator if the work authorized shall not be done and the reasons why. A verbal permit shall be verified by the Department in writing. Under no circumstances shall the Department or its personnel be liable for any damage to property or loss of life incurred by the applicant or any other nearby property owner as a result of the emergency work authorized under this section; and
- 3. Upon completion of the work in accordance with the Department's instructions, the applicant shall file a complete application with appropriate fees and "as-built" drawings for Department review to determine if modifications which may include mitigation or stabilization measures are required under this chapter. Upon completion of the review, a formal permit will be issued.

7:13-4.7 Permit application review procedures

- (a) Within a maximum of 20 State working days following the date of receipt of an application for a permit under this chapter (other than an emergency permit), the Department shall:
- 1. Accept the application for filing, assign an agency project number to it, classify the application complete for review and proceed to review it on the merits;
- 2. Accept the application for filing, assign an agency project number to it, but classify the application as incomplete and request in writing that the applicant submit within a specific period of time specific information to assist the Department in its review of the substantive merits of the application. In such cases, the application will not be considered complete for substantive review until all the information requested by the Department has been received; or
- 3. Return the application without filing, explaining why it is unacceptable for review, and return the filing fee (if any) if the applicant advises the Department that it does not intend to reapply.
- (b) Following the assignment of the agency project number, a report of the "20-day" status of the application pursuant to (a) above will be published in the DEPE Bulletin.
- (c) If, while reviewing the merits of an application deemed complete for review, the Department determines that further information is required from the applicant to assess the accuracy of statements in the application or to otherwise determine whether the proposed regulated activity complies with these rules, the Department may, time

permitting, permit the applicant to amend the application by submitting this additional information within a specified time, or, deny the application on its merits. Amended applications for permits may be submitted pursuant to (g) below.

- (d) The Department shall approve, condition, or disapprove an application within 90 days following the date of receipt of a complete application as described at (a) above. If the Department fails to take action on an application within the specified 90-day period, the application shall be deemed to have been approved, to the extent that the application does not violate other statutes or regulations then in effect and subject to any standard conditions that apply to the type of development involved.
- (e) The Department will grant a one-time 30-day extension of time to the 90-day review period if agreed to by both the applicant and the Department, provided that the applicant or the Department requests, from the other, such an extension either by telephone or in writing prior to the expiration of the 90-day review period. Telephone applications for an extension made by an applicant must be made to the Region head in charge of such applications at the Department or his or her designated agent.
- (f) Permits under the jurisdiction of this chapter are valid for five years. If no construction has begun at the end of the five years, application for a new permit is required if the applicant still wishes to undertake the project. The project shall comply with the requirements in effect at the time the newest application for a permit is deemed complete for review. If construction has begun but has not been completed at the end of five years, construction shall cease until the Department has reviewed the applicant's application for a new stream encroachment permit. In that application, the project shall be revised to the greatest extent possible to meet the regulatory requirements in effect at that time.
- (g) In the event of a Department denial of an application under this chapter or an applicant's withdrawal of such a permit application, the applicant may, only once, submit an amended application for reconsideration or an amended application containing a request for a hardship waiver under N.J.A.C. 7:13-4.8, one or the other, within one year of the date of the Department denial and have the previously submitted fee credited to the new application. Additional applications for reconsideration, additional amended applications or requests for hardship waivers shall require the regulatory processing fee in order to be accepted for filing by the Department.

7:13-4.8 Hardship waivers

- (a) A waiver from strict compliance with the requirements of this chapter may be granted by the Department for any of the following reasons:
- 1. Cases in which the Department determines that there is no feasible and prudent alternative to the proposed project, including the no-action alternative, which

would avoid or substantially reduce any anticipated adverse effects and where the waiver is consistent with the reasonable requirements of the public health, safety and welfare:

- 2. Cases in which the Department determines that the costs of strict compliance are unreasonably high in relationship to the benefits achieved by strict compliance; or
- 3. Cases in which the Department and applicant agree to alternative requirements that, in the judgment of the Department, provides better protection to the public health, safety and welfare.
- (b) A public hearing concerning the waiver application shall be required upon request by the Department or at least five members of the public.
- (c) Except as otherwise provided in this chapter, a delegated agency may grant waivers in accordance with this subsection. Where granted, such waivers are subject to the appeal procedures in N.J.A.C. 7:13-4.10.
- (d) In order for the Department to grant a hardship waiver, the applicant shall demonstrate the following:
- 1. That by reason of the extraordinary or exceptional situation or condition of the property, the strict enforcement of this chapter would result in exceptional and undue hardship upon the applicant in question;
- 2. That the waiver will not substantially impair the appropriate use or development of adjacent property and will not pose a threat to the environment or public health, safety and general welfare; and
- 3. That the exceptional or undue hardship claimed as grounds for the waiver has not been created by the applicant or persons under his or her control.
- (e) The applicant shall submit with an application for a hardship waiver as much of the following information as is relevant to the project:
- 1. A plan for flood proofing the structure to be constructed, the implementation of which shall be a condition of the waiver;
- 2. Proof that appropriate steps shall be taken to anchor structures as mandated by the Uniform Construction Code and local building and construction codes in order to prevent flotation, collapse, or lateral movement;

- 3. An analysis of the consistency between the proposed project and the goals, objectives and limitations of the comprehensive land use plan and flood plain program applicable to the area;
 - 4. Proposed routes to and from the property during floods;
- 5. The projected height, velocity and duration of the flood waters expected at the site during the regulatory flood;
 - 6. The type of soil(s) at the proposed site;
- 7. A statement concerning the current and post-construction land use and value assuming the waiver is granted, including a present-worth cost benefit analysis, and the same analysis assuming denial of the hardship waiver;
- 8. A description of the existing development in the area and the impact of the proposed work on that development;
- 9. Evidence that the project will not distort or reduce the affected watercourse's flood carrying capacity so as to cause significant flooding problems both upstream and downstream from the proposed project;
- 10. An analysis of the extent to which the sediment regime and water quality of the watercourse will be affected by the proposed waiver; and
- 11. A description of the potential effects of the project upon the environment, assuming the waiver is granted.
- (f) The applicant shall also submit proof of public notice for consideration for a hardship waiver as required by N.J.A.C. 7:13-4.2.
- (g) The applicant shall submit the request for a waiver along with the appropriate documentation to the Department.
- 1. The Department shall notify the applicant of the results of its review within 90 days of the receipt of an application deemed complete for substantive review by the Department.
- 2. Before making a decision on a request for a waiver of strict compliance, the Department may request the applicant to provide additional information and/or documentation as provided in N.J.A.C. 7:13-4.7(a).

- (h) The denial of a waiver shall be without prejudice. However any additional application for relief under this section shall be accompanied by a new fee in order to be accepted for filing by the Department.
- (i) A hardship waiver granted pursuant to this section does not relieve the applicant from obtaining any other approvals, certifications or permits required by Federal. State or local law.

7:13-4.9 Permit modification procedures

- (a) There shall be no modifications to Department-approved plans or any permit condition without the express written permission of the Department. Six sets of plans accompanied by a letter requesting the modification and a fee as specified in the 90-Day Construction Permit Rules (N.J.A.C. 7:1C) are required to apply for modification of a permit condition or any approved plan. Except for additional watercourses added to watercourse cleaning permits pursuant to 7:13-2.5(b), only items already approved on the original permit may be modified.
- (b) Modifications to Department-approved projects that will affect the hydraulic capacity of the watercourse shall not be considered or approved by the Department under this section. Such modifications must be contained in a new application for a new Permit and must comply with the regulations in effect on the date that the new permit application is deemed complete for review.

7:13-4.10 Appeal procedure to the Department

- (a) Subject to the limitation on third-party hearing rights specified in (e) below, any person who considers himself or herself aggrieved by the approval or denial of an application for a permit may, within 10 days of publication of notice of the decision in the DEPE Bulletin, or within 10 days of publication of notice of the decision by the permittee pursuant to (b) below, whichever occurs first, direct a written request for a hearing to the Office of Legal Affairs, ATTENTION: Adjudicatory Hearing Requests, Department of Environmental Protection, CN 402, Trenton, New Jersey 08625-0402.
- 1. The written request for a hearing on appeal shall include the appropriate agency project number and, where the appeal is taken by someone other than the applicant, evidence that a copy of the written request for hearing an appeal has been mailed to the applicant/permittee.
- 2. Within 14 days of the date on which the initial request for a hearing was postmarked, the person appealing the decision shall submit an additional statement describing, in detail, how that person is aggrieved by the decision, and which findings of fact and conclusions of law are being challenged.

- (b) A permittee may publish notice of the Department's final decision in a newspaper of Statewide circulation and a newspaper of regional circulation which includes the municipality in which the project site is located. The permittee shall provide a copy of the Department's decision to any person who requested such notice by certified mail. The Department shall maintain a list of such newspapers and a list of all persons who have requested notice of the decision.
- (c) Pending appeal of the Department decision and the Commissioner's final decision on the appeal, a person may apply to the Commissioner for a stay of the issuance of a permit by written request and for good cause shown therein. The Commissioner may stay the issuance of the permit upon such terms and conditions as the Commissioner may deem proper in his or her sole discretion. The request for stay of issuance of the permit shall be made within 21 days of the issuance of the Department approval of the permit application.
- (d) When a request for a hearing concerning a Department decision on a permit application has been granted by the Department, the request shall be referred to the Office of Administrative Law for a fact-finding hearing if required pursuant to the Administrative Procedure Act (N.J.S.A. 52:14B-1 et seq.), after which, the Commissioner shall issue a final decision adopting, rejecting or modifying the findings of fact and conclusions of law of the administrative law judge, within the time frame specified in N.J.S.A. 52:14B-10.
- (e) Nothing in this section shall be construed to provide a right to an adjudicatory hearing in contravention of N.J.S.A. 52:14-3.1 through 3.3 (P.L. 1993, c.359).

7:13-4.11 Permit application review by delegated

When authority to approve certain types of regulated activities is delegated in writing by the Department to another agency under provisions of this chapter and the Acts, that agency shall apply the standards and criteria of this chapter to all matters arising under the jurisdiction of this chapter which have been delegated to that agency.

Subchapter 5. Implementation

7:13-5.1 Consistency with other requirements in permit review

(a) A permit under this chapter is expressly conditioned upon the permittee complying with all other applicable Federal, State and local statutes, rules and regulations, orders, standards, plans, and ordinances which may apply to the work necessary to accomplish the proposed project, and obtaining all other permits, licenses or approvals required for the work which is a part of the proposed project. The issuance of a permit pursuant to this chapter shall not obligate the Department to grant or deny

an application by the permittee for any other license, permit or approval issued by the Department.

(b) In cases where the Department has not delegated authority under N.J.A.C. 7:13-5.3, no local agency or employee thereof shall grant any application for development as defined in the "Municipal Land Use Law" (N.J.S.A. 40:55D-1 et seq.) for an activity regulated under this chapter until an application for a permit under this chapter has been approved by the Department. The Department will consider this provision satisfied if the local approval is conditioned upon obtaining a permit under this chapter.

7:13-5.2 Creation of a county water resources association

The governing body of any county may, by ordinance or resolution, as the law may provide, create a county water resources association to discuss and coordinate county flood control and water management programs, to advise the county governing body on these issues and to undertake any other such duties concerning water management as the county governing body may legally delegate to it by ordinance or resolution. Members of this Association shall be appointed by the county governing body and may include the chief administrative officer or executive of any county planning agency, county engineer's office, county utility authority, county health department, county mosquito commission, county soil conservation district, county parks agency and any other person with relevant experience or training.

7:13-5.3 Delegation of power to counties

- (a) Except as otherwise expressly provided in this chapter, the Department may delegate its authority to review and decide any application made to it pursuant to this chapter as well as its power to enforce any aspect of its legal obligations arising under the Acts to a county governing body which shall expressly agree to accept such designation, and follow the rules stated herein, and which, in the Department's judgment, retains those employees with professional training and education capable of properly administering the provisions of this chapter.
- 1. A county wishing to apply for authority to issue permits pursuant to the provisions of this chapter or to undertake enforcement of any of the provisions of this chapter shall submit a written request to the Department and specifically describe those aspects of the permitting and enforcement authority of the Department under this chapter which it wishes to assume. The county shall also submit evidence of a formal approval by the county governing body agreeing to apply for delegation of the authority or obligations described in the application and agreeing to adopt, in the event the request is granted, an ordinance or resolution containing all provisions of this chapter relevant to the duties and obligations to be assumed by the county. The request shall

also describe in detail the personnel, physical resources and source and amount of funding by which the county shall fulfill the obligations the county wishes to assume.

- 2. A county to which permitting authority or enforcement obligations have been delegated pursuant to this subsection shall preserve, for the Department review, all documents, plans, maps, memoranda and notes as necessary which document that it has discharged its delegated duties in accordance with the applicable provisions of this chapter.
- 3. The Department shall review the county records pertaining to all duties delegated to the county under this subsection at least once every 365 days after the date of the formal delegation of duties to the county, and may at any time revoke such delegation if, in the judgment of the Department, the county has failed to properly administer powers delegated to it, which may include a failure to maintain the records stipulated in (a)2 above.
- 4. The county governing body to which permitting functions under this chapter have been delegated shall not charge fees in excess of those promulgated by the Commissioner pursuant to N.J.S.A. 13:1D-33.
- (b) The Department shall not delegate the powers to review or decide any application for a permit pursuant to this chapter filed by a State agency.

7:13-5.4 Penalties

Any person who violates a provision of this chapter shall be subject to penalty and injunctive relief, as applicable, pursuant to N.J.S.A. 58:16A-63 and 58:10A-1 et seq.